

ANNUAL REPORT
OF THE
SANITARY COMMISSIONER WITH THE
GOVERNMENT OF INDIA

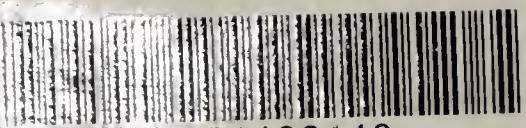
FOR
1912

WITH
APPENDICES AND RETURNS OF SICKNESS AND MORTALITY AMONG
EUROPEAN TROOPS, NATIVE TROOPS, AND PRISONERS
IN INDIA FOR THE YEAR.



CALCUTTA
SUPERINTENDENT GOVERNMENT PRINTING, INDIA
1914.

Price, Three Rupees or 4s 6d.



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Map of INDIA

TO ILLUSTRATE

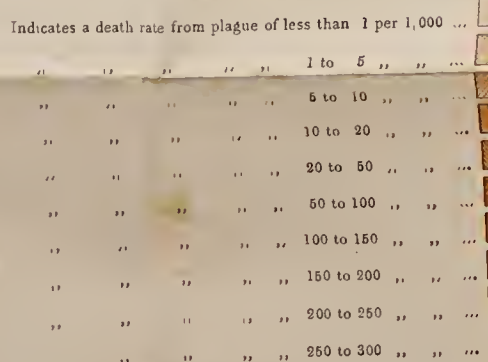
THE ANNUAL REPORT OF THE SANITARY COMMISSIONER
WITH THE GOVERNMENT OF INDIA FOR 1912.
MORTALITY FROM PLAGUE FROM THE COMMENCEMENT
OF THE PRESENT PANDEMIC IN 1896 UP TO THE END OF 1912.

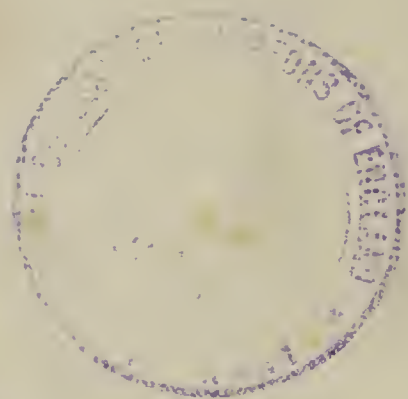
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Civil Provinces
Districts
Main Roads
Railways





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1912

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ANNUAL SANITARY REPORT FOR 1912.

SECTION I.

EUROPEAN ARMY OF INDIA.

(From the Director, Medical Services in India.)

1. The average strength of European troops serving in India during 1912 is India- Appendix A to Section I, returned as 71,001 warrant officers, non-commissioned officers and men. The following report on their health is exceptionally good and in some respects constitutes a record over the good reports of former years. The chief features are shown in the following table :—

All causes.	RATIO PER 1,000 OF STRENGTH.		
	1907-11.	1911.	1912.
Admissions	679'7	524'7	547'9
Constantly sick	38'49	28'81	28'86
Deaths in the Command	6'77	4'89	4'62
Invalids sent home	12'88	7'12	6'68
„ finally discharged	7'17	6'20	...
Average sick time to each soldier	14'05	10'52	10'56
Average duration of each case of sickness	20'67	20'05	19'28

It is unnecessary to discuss the general causes which have led to these results : they have been considered in former years and are still operative.

2. These number 328 as compared with 354 in 1911. This number is the lowest on record and equivalent to a ratio of 4'62 per 1,000 of strength which also is a record. The chief causes of death were, 26 from enteric fever, 2 from paratyphoid fever, 3 from small-pox, 10 from cholera, 11 from dysentery, 5 from plague, 12 from malaria, 3 from pyrexia of uncertain origin, 2 from tetanus, 20 from pneumonia, 11 from pulmonary tuberculosis, 3 from alcoholism, 2 from multiple neuritis, 19 from appendicitis, 2 from enteritis, 1 from colitis, 1 from intestinal perforation, 23 from suppurative hepatitis, 14 from heatstroke, 1 from sunstroke, 20 from drowning, 1 from hanging, 21 from accidents, 20 from gunshot wounds, mainly suicidal, and 7 from various forms of poisoning.

3. The number of cases of this disease is the lowest on record. Throughout the Enteric Fever. Appendices A. and whole of India only 118 cases are returned with B., Tables I, II, III and V. 26 deaths, this gives an admission rate of 1'7 per 1,000 of strength and a death rate of 0'37. The case mortality is 19 per cent.; this is somewhat higher than the rate for previous years. The distribution by branches of the service shows that 15 cases with 2 deaths occurred in the cavalry, 41 cases with 9 deaths in the artillery and ammunition columns, 60 cases with 14 deaths in the infantry and 2 cases with 1 death among staff and departments. Among individual units, the incidence has been fairly evenly distributed, and the units affected have not had more than from 1 to 5 cases among

them. Of garrisons, Poona, Ambala, Secunderabad and Bangalore have shown the largest number of cases. There has been a remarkable freedom from attack among nursing orderlies and others engaged in attendance upon the sick; also there is no evidence to show that water, milk or other articles of food have been the cause of the disease among the troops. Of the 118 cases of enteric fever which occurred, 78 were among inoculated men and 40 among the non inoculated, but as the inoculated population amounts to about ninety per cent. of the whole, the number of the inoculated exposed to infection is nine times as great as the number of non-inoculated men. Other considerations connected with this question of inoculation against enteric fever will be discussed in a subsequent section of this report. An analysis of the years of service in India, presented by these cases of enteric fever, shows that 35 had been but one year in India, 15 two years, 14 three years, 15 four years, 20 five years, 13 six years, 1 seven years and 5 eight years and over.

Paratyphoid Fever.—As in 1910 and 1911, a differentiation has been carefully made during 1912, between the classical enteric fever and the disease known as paratyphoid fever. For the year under review, the returns show 64 cases of paratyphoid fever with two deaths. From all the cases of paratyphoid fever the specific bacillus has been isolated so that no ambiguity exists as to the accuracy of diagnosis. Of the total cases so diagnosed, 60 yielded the "A" and 4 the "B" variety of the micro-organism. With the exception of one man, all these cases of paratyphoid fever occurred among men who had been inoculated against enteric fever. The chief incidence of this disease has been at Fyzabad, where 25 cases occurred. The incriminating factor seems to have been an undetected and unsuspected infected person, indicating that in this disease, as in enteric fever, man himself is the most dangerous factor. An idea that the bed bug might disseminate the disease was mooted in respect of this series of cases but warranted by no evidence. As regards years of service in India, of the paratyphoid fever cases, 11 had one year, 8 had two years, 12 had three years, 10 had four years, 8 had five years, 5 had six years, 2 had seven years and 4 had eight years or more.

The distribution of paratyphoid fever by branches of the service shows that 8 cases occurred among the cavalry, 15 among the artillery or ammunition columns, and 41 among the infantry. The distribution of paratyphoid fever appears to be very uneven in the various divisions, as compared with enteric fever: the figures for both diseases are shown in the following table:—

Divisions.					ENTERIC FEVER.		PARATYPHOID A.	
					Admissions.	Deaths.	Admissions.	Deaths.
1st (Peshawar)	...	...	...	...	2	1	2	...
2nd (Rawalpindi)	...	...	...	...	17	2	4	...
3rd (Lahore)	...	...	...	...	15	5	6	1
4th (Quetta)	...	...	...	...	1	...	...	...
5th (Mhow)	...	...	...	...	11	4	4	...
6th (Poona)	...	...	...	...	19	...	...	...
7th (Meerut)	...	...	...	...	9	3	9*	...
8th (Lucknow)	...	...	...	...	15	6	34	1
9th (Secunderabad)	...	...	...	...	26	5	4	...
Burma	...	...	...	...	...	...	...	...
Aden	...	...	...	...	3	...	...	...
Marching	...	...	...	...	...	...	1	...
Total					118	26	64	2

*Including 4 cases of Paratyphoid B.

Enterica.—Under this term we combine the incidence of the two diseases, enteric fever and paratyphoid fever. This grouping is necessary for purposes of comparison with years anterior to 1910. Taking both enteric and paratyphoid fever together, we find that 182 cases occurred among European troops in India in 1912 with 28 deaths. This is equivalent to an admission rate per 1,000 of 2·6 and a death rate of 0·39 per 1,000 of strength. Ten years ago the admission rate was 19·7, and the death rate 3·76. The following table gives the corresponding figures for the last five years :—

Enteric Fever and Paratyphoid A and B.

Years.						RATIO PER 1,000.		Case mortality per cent.
						Admissions.	Deaths.	
1908	...	...	...	...	...	14·6	2·74	16·9
1909	...	...	...	...	...	8·9	1·58	14·3
1910	...	...	...	...	...	4·6	·63	11·2
1911	...	...	...	...	...	3·8	·33	7·9
1912	...	...	..	...	...	2·6	·39	13·1

Another table shows the annual admission rate per 1,000 of strength for enterica during the last five years in all stations having an average strength of over 500 during 1912. The most notable excess rates are in Fyzabad, Barian, Dalhousie, Lucknow, Poona and Secunderabad.

Stations with average annual strength of over 500 during 1912.						1908.	1909.	1910.	1911.	1912.
Peshawar	...	...	...	...	...	31·3	11·3	7·9	3·0	·6
Nowshera	...	...	...	...	...	19·8	14·3	6·1	6·4	1·9
Rawalpindi	...	...	...	...	...	31·9	7·2	5·9	·7	2·7
Gharial	...	...	...	...	...	24·8	3·7	2·4	...	...
Barian Camp	...	...	...	...	...	14·3	6·2	4·8	8·2	11·3
Sialkot ...	...	...	...	...	...	20·9	20·7	15·1	·8	1·9
Lahore Cantonment	...	...	...	...	...	11·8	25·9	9·7	4·5	3·8
Dalhousie	...	...	...	...	...	10·8	6·9	4·0	...	6·3
Multan ...	...	...	...	...	...	30·8	20·3	2·3	4·4	2·2
Ferozepore	...	...	...	...	...	9·8	1·0	1·0	1·0	...
Jullundur	...	...	...	...	...	17·9	22·5	1·6	...	...
Ambala	...	...	...	...	...	8·3	3·1	5·3	...	4·8
Dagshai	...	...	...	...	...	2·8	2·9	1·5	9·9	1·3
Meerut...	...	...	...	...	...	27·4	26·0	2·3	1·8	3·2
Agra ...	...	...	...	...	...	9·8	5·5	2·4	...	...
Bareilly	...	...	...	...	...	3·5	15·1	...	16·8	1·5
Ranikhet	...	...	...	...	...	14·0	9·6	6·0	·5	1·2
Chakrata	...	...	...	...	...	4·3	3·6	1·5	1·6	·9
Lucknow	...	...	...	...	...	14·3	23·2	4·2	15·4	5·5
Fort William	...	...	...	...	...	5·1	5·8	1·5	·8	4·8
Lebong...	...	...	...	...	...	...	1·5	...	1·6	1·6

Stations with average annual strength of over 500 during 1912.					1908.	1909.	1910.	1911.	1912.
Allahabad	...	...	...	...	7'4	7'3	...	4'2	...
Cawnpore	...	...	...	...	25'4	...	...	...	1'0
Fyzabad	...	...	...	...	19'2	13'7	14'2	11'6	30'6
Quetta...	...	...	...	...	17'9	4'8	2'2	3'5	'3
Karachi	...	...	...	...	6'0	3'6	3'9	4'4	...
Hyderabad	...	...	...	...	...	...	...	1'8	...
Mhow ...	...	...	...	...	4'1	2'8	6'9	2'7	1'1
Kamptee	...	...	...	...	11'1	19'5	14'4	3'4	1'0
Nasirabad	...	...	...	...	5'0	7'2	1'1	6'0	4'5
Jhansi ...	...	...	...	...	26'5	7'5	13'1	3'2	1'0
Jubbulpore	...	...	...	...	34'6	11'9	6'6	4'8	2'7
Poona ...	...	...	...	...	9'8	12'4	8'4	3'0	5'3
Kirkee ...	...	...	...	...	10'1	26'0	12'0	5'4	'9
Bombay (Colaba)	...	...	...	...	1'7	'9	2'8	3'9	1'7
Ahmednagar	...	...	...	...	17'4	9'3	1'7	2'9	1'0
Belgaum	...	...	...	...	14'6	12'5	8'0	14'0	3'7
Secunderabad	...	...	...	...	25'9	6'7	3'4	4'5	5'0
Bangalore	...	...	...	...	19'0	10'9	6'0	4'9	4'6
Madras...	...	...	...	...	11'7	...	1'5	3'0	...
Wellington	...	...	...	...	2'9	5'6	1'9	4'3	3'4
Maymyo	...	...	...	...	...	...	...	...	...
Shwebo	...	...	...	...	11'3	...	...	...	...
Rangoon	...	...	...	...	1'6	1'5	'8	'9	...
Aden ...	...	...	...	...	1'8	2'7	2'9	...	3'3

Anti-enteric inoculation :—The good work of former years has been maintained. Of the European troops serving in India, ninety per cent. have been inoculated. By arms of the service, 88 per cent. of the cavalry are inoculated, 88 per cent. of the artillery and ammunition columns, 93 per cent. of the infantry, 62 per cent. of the engineers, and 48 per cent. of the staff and departments are similarly protected. The following table shows the result of the returns regarding inoculation as made on the last day of the year :—

Branch of Service.					Number of inoculated men who have not had Enteric Fever.	Number of inoculated men who have had Enteric Fever.	Number of not inoculated men who have not had Enteric Fever.	Number of not inoculated men who have had Enteric Fever.
Cavalry	...	...	...	...	4,336	122	516	60
Royal Horse Artillery	...	...	...	...	1,757	29	130	22
Royal Field Artillery	...	...	...	...	5,998	106	447	122
Royal Garrison Artillery...	...	...	...	...	3,392	23	600	74
Ammunition Column	...	...	...	...	726	6	79	29
Infantry	...	...	...	...	46,068	536	2,513	378
Attached troops	...	...	...	...	927	11	182	23
Royal Engineers	...	...	...	...	130	...	68	11
Staff and Departments	...	...	...	...	671	6	639	95
Total					64,005	839	5,174	814

Of the 118 cases of enteric fever which occurred in 1912, we find that 78 were inoculated and 40 were non-inoculated men. Ten deaths occurred among the inoculated and sixteen among the non-inoculated. The ratio per 1,000 of strength of admission for enteric fever among the inoculated was 1·20, and the corresponding ratio of deaths was 0·15. Among the non-inoculated the admission rate was 6·69 per 1,000 and the death rate 2·67. As regards case mortality, the percentage figures are 12·8 for the inoculated and 40 for the non-inoculated. The disparity between the two groups is very marked. On the other hand the influence of inoculation against paratyphoid infection appears to be negative. This is in accord with our previous experiences. Of the 64 cases of this disease occurring during the year, only one had not been inoculated.

If we take the two diseases, enteric and paratyphoid fever together, we find that the admission rate among the inoculated is 2·17 per 1,000, while among the non-inoculated it is 6·84. The corresponding death rates per 1,000 are 0·43 and 2·7. The figures indicate that against true enteric fever the value of inoculation is most marked, and the case in favour of the procedure is much strengthened by our experiences during 1912. The disturbing factor is paratyphoid fever. The re-inoculation of men against enteric fever, after a lapse of thirty months since their primary inoculation, is being steadily pressed and meets with a steady support from all ranks.

The Enteric Fever Depôts at Naini Tal and Wellington have done excellent work during the year. Owing to the great reduction in prevalence of enteric fever they have been much less crowded than in former years, but this fact constitutes one of the strongest arguments in support of their original inception and maintenance, inasmuch as they are and have been our great defence against the inadvertent liberation on convalescence, among the healthy, of men who are still potentially infective.

To Naini Tal 89 cases of alleged enteric fever were sent, also 67 cases of paratyphoid fever and 82 cases of pyrexia of uncertain origin. Of these, ultimately, 80 were found to be true cases of enteric fever, 55 were cases of paratyphoid (A) fever and 4 were cases of paratyphoid (B) fever. The importance of sending the pyrexia of uncertain origin cases to the enteric fever depôts, as suspicious and possibly dangerous, although their clinical symptoms have not warranted a definite diagnosis of either enteric or paratyphoid fever, is shown by the fact that two paratyphoid carriers, one a chronic urinary case, were detected among them; and had they, under the old system, not been sent to the depôt for critical scrutiny, would have produced a large crop of fresh cases among their fellows. In spite of the character of the cases housed in the depôt, no case of enteric fever was contracted in the depôt during the year; one case, however, of paratyphoid fever (A) occurred. The patient was a convalescent from pyrexia of uncertain origin and occupied the same barrack room as a chronic urinary carrier of bacillus paratyphosus (A). Since then all known carriers have been segregated in one room with separate latrine accommodation. One patient died from pulmonary tuberculosis. He had been sent to the depôt convalescent from pyrexia of uncertain origin. Two other convalescents from pyrexia of uncertain origin turned out to be suffering from kala-azar. The disease appeared to be traceable to Dinapore, and both men were invalided to England. One of the cases exemplified the difficulty in diagnosing accurately the condition, except by liver or spleen puncture, as his temperature chart resembled closely that of typical paratyphoid fever, with long apyrexial intervals. Seven carriers of the bacillus paratyphosus (A) were discovered during the year, but no carrier of (B) typhosus. The details concerning these carriers and how finally disposed of, are given in the table on the following page.

No less than 8,466 bacteriological examinations of dejecta were made during the year, or 4,401 examinations of urine and 4,065 of fæces. An important part of the work of this depôt has been the examination of cultures sent from all parts of India. A total of 217 cultures of this nature were received and examined. This work was inaugurated in 1911, and has been productive of great good as it enables a check or verification of opinions formed in the Divisions concerning various micro-organisms isolated from pyrexias of various kinds. Of the 217 cultures sent up, 84 were suspected to be B. typhosus, 67 to be B. paratyphosus A., 3 to be B. paratyphosus B. and 63 of doubtful nature. Of these 100 were definitely found to be B. typhosus, 71 were B. paratyphosus A., 3 were B. paratyphosus B. and 43

organisms of various kinds. Of the importance of this work there can be no doubt, as it enables a complete conspectus to be made of the distribution of various micro-organisms all over India. Of the 128 organisms recovered from the blood of patients, there were 21 strains that were neither *B. typhosus* nor either variety of the *B. paratyphosus*. Attempts were made to classify them. Of the more important findings it is worthy of record that *B. alkaligenes fæcalis* occurred five times and *B. cloacæ* twice. McConkey's bacilli numbers 98, 99 or 103 occurred twice, numbers 69 or 70 occurred twice and number 36 once. The gradual accumulation of facts like this extending over a series of years will do much to throw light on the nature of the infecting micro-organisms associated with pyrexias of obscure origin. It is noteworthy that the *B.* variety of the paratyphoid bacillus was recovered from the blood on three occasions only, whereas the *A.* variety was recovered sixty-three times. Important work was carried on with regard to the viability of the *A.* variety of the paratyphoid bacillus in the fæces from carrier cases when the dejecta were buried in earth as in the trenching system. Previous findings were corroborated, that is, that the fæces remained infectious for long periods in the cold weather but became innocuous within ten days in the warmer months, owing to the rapid multiplication of saprophytic micro-organisms. The viability of the same bacillus in flies fed upon naturally infected fæces was found not to extend beyond twenty-four hours.

Corresponding good work has been done at the dépôt for Southern India, at Wellington. Fifty-three convalescents were received in this dépôt during the year. Of these, 45 were said to be enteric fever, 5 were said to be paratyphoid *A.* and 3 were said to be pyrexias of uncertain origin. Of these 38 were true enteric fever, and 5 were paratyphoid (*A.*) fever. Among these men no enteric carriers were detected, but three paratyphoid (*A.*) carriers were found. Details concerning them are given in the table. The research work at this dépôt has been mainly as to the efficacy of treating carrier cases with autogenous vaccines. Although from a curative point of view, earlier hopes have not been confirmed, still the important fact has been elicited that some men are tolerant of very large doses of the paratyphoid *A.* bacillus, a micro-organism usually regarded as being very toxic.

Carriers in Dépôt on January 1st, 1913.

Depôt.	Rank and name.	Number.	Unit.	Place and date of origin.	Period under observation.	Type of carrier.	How finally disposed of.	Sent as a convalescent from.
Naini Tal	Pte. C. ...	4203 ...	8th Hussars ...	Lucknow—15th February 1911.	19th February 1912 to 4th November 1912.	Paratyphoid <i>A.</i>	Invalided to England.	Pyrexia of uncertain origin.
"	Pte. S. ...	6062 ...	8th Hussars ...	Lucknow—30th March 1912.	16th April 1912.	Urinary Chronic. Paratyphoid <i>A.</i> Fæcal Acute.	Still in Dépôt.	Paratyphoid <i>A.</i> Fever.
"	Pte. C. ...	9300 ...	2nd East Yorkshire.	Fyzabad—24th March 1912.	30th April 1912.	Paratyphoid <i>A.</i> Fæcal Acute.	Ditto ...	Paratyphoid <i>A.</i> Fever.
"	Pte. J. ...	11482 ...	4th Worcesters	Bareilly—21st February 1912.	3rd May 1912 to 4th November 1912.	Paratyphoid <i>A.</i> Fæcal and Urinary.	Invalided to England. Chronic intermittent.	Paratyphoid <i>A.</i> Fever.
"	Pte. W. ...	6759 ...	8th Hussars...	Lucknow—27th April 1912.	15th May 1912	Paratyphoid <i>A.</i> Fæcal Acute.	Still in Dépôt.	Pyrexia of uncertain origin.
"	Sergt. P. ...	11091 ...	Military Works	Murree—26th June 1912.	10th September 1912.	Paratyphoid <i>A.</i> Urinary Acute.	Returned to duty.	Enteric Fever.
"	Pte. A. ...	10132 ...	Highland Light Infantry.	Lucknow—2nd October 1912.	6th November 1912 to 9th January 1913.	Paratyphoid <i>A.</i> Fæcal Acute.	Ditto ...	Paratyphoid <i>A.</i> Fever.
Wellington	Pte. W. ...	7901 ...	1st Oxford and Buckinghamshire.	Wellington—23rd September 1911.	11th November 1911 to 8th March 1912.	<i>B.</i> Paratyphosus <i>A.</i> Fæces.	Invalided to England.	Enteric Fever.
"	L.-Cpl. D. ...	6380 ...	2nd East Lancashire Regiment.	Mhow—1st December 1912.	3rd March 1912 to 8th March 1913.	<i>B.</i> Paratyphosus <i>A.</i> Urine.	Ditto ...	Paratyphoid <i>A.</i> Fever.
"	Br. S. ...	55256 ...	2nd Battery, Royal Field Artillery.	Bangalore—17th October 1912.	26th November 1912.	<i>B.</i> Paratyphosus <i>A.</i> Fæces and Urine.	Still in Dépôt.	Paratyphoid <i>A.</i> Fever.

4. This group is associated intimately with the enteric, paratyphoid and malaria cases. In spite of increased care to secure accuracy of diagnosis we cannot say that finality has been reached or that we have overcome all the difficulties. **Pyrexia of Uncertain Origin.** Appendix A, Tables I, II, III and VII. The number of cases under this heading in 1912 was 1,506 as against 1,914 in 1911 and 2,733 in 1910. Three deaths are recorded in this group. They occurred at Lahore, Lucknow and Rangoon. The first would appear to have resulted from effects of heat as the man was under treatment for but a few days during extremely sultry weather: the Lucknow case died from heart failure supervening on a pyrexia of indefinite nature: the Rangoon case was one of a similar kind. The following table shows the essential facts under this and the next heading for the last three years:—

Divisions.			ADMISSIONS PER 1,000 OF STRENGTH.					
			PYREXIA OF UNCERTAIN ORIGIN.			MALARIA.		
			1910.	1911.	1912.	1910.	1911.	1912.
1st (Peshawar)	...	...	29·6	54·0	18·0	421·8	196·0	192·4
2nd (Rawalpindi)	...	...	40·8	14·2	16·5	128·4	86·7	94·0
3rd (Lahore)	...	...	54·6	39·6	33·5	156·1	94·8	80·0
4th (Quetta)	...	...	7·4	10·3	9·4	130·4	129·2	103·3
5th (Mhow)	...	...	7·3	5·2	4·8	206·8	168·5	167·7
6th (Poona)	...	...	42·5	20·2	22·4	102·3	95·5	84·9
7th (Meerut)	...	...	28·0	9·6	2·8	191·5	75·2	37·8
8th (Lucknow)	...	...	53·7	56·3	38·8	64·6	48·0	31·5
9th (Secunderabad)	...	...	21·8	13·4	3·1	32·0	48·0	47·7
Burma	...	...	82·6	90·2	109·2	53·9	41·8	91·8
Aden Brigade	...	...	88·5	35·7	31·4	74·1	34·7	26·0

5. Under this head we are able to record 680 fewer admissions than in 1911. **Malaria.** Appendix A, Tables I, II, III and VI. There were, however, twelve deaths as against only six in the previous year. The question of malaria prevention was discussed last year and there is nothing to add. Until the use of mosquito nets by troops is general, it is unlikely that we shall obtain any great reduction in malaria prevalence. The Government of India have definitely decided to incur no expense in providing nets for soldiers other than in a few selected places, the provision, therefore, of these protectors for the men depends entirely upon regimental initiative. We are able to record a slow but steady increase of the use of nets by soldiers in barracks. Many are provided regimentally and a few are private purchases by the men themselves. There has been no abatement of active anti-malarial measures in all garrisons by means of mosquito brigades. Concurrent with these activities, the administration of quinine has been steadily pressed and the combined influence of both these measures is slowly bearing fruit.

6. The following table summarizes the facts as to this pyrexia, malaria, and Sandfly fever. Tables I, II and III.

				RATIO PER 1,000 OF STRENGTH.					
Year.				PYREXIA OF UNCERTAIN ORIGIN.	MALARIAL FEVERS.			SANDFLY FEVER.	
				Admis- sions.	Admis- sions.	Constantly sick.	Invalids sent Home.	Admis- sions.	Constantly sick.
1910	...	...	...	37.7	132.0	4.26	.07	7.1	.13
1911	...	...	...	26.4	90.2	2.96	.10	19.2	.38
1912	...	...	...	21.2	82.4	2.96	.04	30.5	.58

The admissions for sandfly fever rose in 1912 to 2,163 as compared with 1,393 in 1911. This increase must be read in connection with the reductions under pyrexia of uncertain origin and malaria. It is largely a matter of accuracy in diagnosis. The prophylaxis of this disease is associated intimately with that of malaria, and until all troops make a systematic use of netting during the night there is bound to be a considerable amount of temporary sickness from sandfly fever. Fortunately, it is associated with no mortality and, in its most aggravated form, is limited largely to a few stations, more especially Peshawar, Meerut, Nowshera and Rawalpindi.

7. We have to record ten cases of this disease with five deaths. Two cases and one death occurred at Meerut, one non-fatal case at Jubbulpore, and seven cases with four deaths at Secunderabad. Considering the extent to which plague is still prevalent in India, it is remarkable that no greater incidence of the infection has occurred among European troops.

8. Cholera was the cause of 19 admissions and 10 deaths. This is a lower incidence than in 1911. One series of six cases with four deaths occurred at Jhansi. The infection seems to have been conveyed by barrack menials, who themselves were in contact with the disease by resorting to the city. Three cases occurred at Poona with one death: the disease was prevalent in the adjacent bazaars. At Meerut three cases with one death are reported. All these cases occurred on the same day in the section hospital. Infection was undoubtedly contracted in hospital, but how, is not apparent. The disease existed in the locality but no evidence is available as to how it was conveyed to these three men. There was no case among the menials nor suspicious symptoms among any of the other patients. The other seven cases occurred at Attock, Rurki, Fort William, Cawnpore, Secunderabad and Ahmednagar. In all these cases there was a definite history of recent visits to local bazaars.

9. Small-pox accounts for seventeen cases and three deaths. This is a much higher incidence than we have had for some years. The deaths occurred at Ferozepore, Landour and Bellary. The fatal case at Bellary showed no marks of previous vaccination—the man had been unsuccessfully vaccinated in 1908—the two fatal cases at Landour and Ferozepore had been revaccinated successfully in 1894 and 1908, respectively. Of the 14 non-fatal cases, all except one (he had marks of vaccination in infancy) had been successfully re-vaccinated.

The source of infection in all these cases was difficult to trace, but as small-pox was prevalent in all the bazaars and cities, it is reasonable to assume infection through barrack menials.

More vaccinations were performed during 1912 than in the preceding two years. There were ten primary vaccinations and 8,514 re-vaccinations among the men. Of the primary cases, four were successful, that is, three gave one vesicle and one three vesicles. Of the re-vaccinations, 91 gave four vesicles, 1,015 gave three vesicles, 1,271 gave two vesicles, 621 gave one vesicle, 912 gave merely papules surrounded by an areola, and 4,604 were failures. The following table gives the essential figures as to small-pox and vaccination during recent years:—

INDIA.

Year.				SMALL-POX.		Number of Primary and Secondary Vaccinations.
				Admissions.	Deaths.	
1908	...	...	...	53	2	15,956
1909	...	...	...	19	1	12,773
1910	...	...	...	3	...	7,346
1911	...	...	...	1	...	6,726
1912	...	...	...	17	3	8,524

Measles. Table XXXIII. Measles gave 16 admissions but no death.

Scarlet Fever. Table XXXIII. Scarlet fever gave one admission but no death.

10. Dengue accounts for no less than 364 admissions, but no death. The incidence of this disease is much higher than in former years. Most of these cases were reported from Calcutta and Madras, where the disease was peculiarly prevalent amongst Indians. They represent a class of case in which precise diagnosis is open to some difficulty and needs to be considered in association with the large group of pyrexias of uncertain origin. There is some reason to think that the infection is connected with the bites of small insects of the sandfly group. The matter has been and is the subject of much microscopic investigation by medical officers, but so far no definite knowledge has been obtained.

11. Rabies does not appear to have occurred during the year, but 81 cases are reported as having undergone anti-rabic treatment. There was no death.

12. We have had 5 cases of Kala-azar. Two were discovered at Naini Tal in the Enteric Dépôt, the men having been sent there for paratyphoid fever. The three other cases occurred at Dinapore, Dum Dum and Chakrata; all were invalided.

13. Beri-beri is not reported this year, but we have 60 cases with two deaths shown under the head of multiple neuritis. These are
Beri-beri. Table XXXIII. mainly from Calcutta and other stations in Bengal. The fatal cases died of cardiac failure. This group of cases is still associated with obscurity, but the evidence is slowly accumulating which suggests that the symptoms are due to a disturbed metabolism, in which the essential factor is the absence from the dietary of what may be called an activator. Too little is yet known concerning this chemical substance in food, and as regards cases in the army, we recommend suspension of judgment or the expression of dogmatic opinions. What little is known suggests the absence from certain foods of an essential principle or activator ; why this should occur is not known, but the facts indicate the consistent occurrence of these cases in certain areas where climatic conditions favour

a rapid degradation of food-stuffs. The whole question is under critical scrutiny, but the problem is too complicated to justify either hasty conclusions or action based on those conclusions. The symptoms, in the majority of cases, are not explicable on the assumption of an alcoholic origin.

14. Dysentery and liver abscess show a reduction in incidence. There were 371 admissions for dysentery with 11 deaths, as against 560 cases with 19 deaths in 1911. The figures for liver abscess are 47 cases with 23 deaths as compared with 71 cases and 33 deaths in the previous year. The comparative incidence of these diseases in recent years is shown in the following table :—

INDIA.

YEAR.					RATIO PER 1,000.			
					DYSENTERY.		LIVER ABSCESS.	
					Admissions.	Deaths.	Admissions.	Deaths.
1908	...	...	...	...	14'4	'42	1'7	'80
1909	...	...	...	...	11'2	'25	1'4	'48
1910	...	...	...	...	7'7	'23	1'0	'48
1911	...	...	...	...	7'7	'26	1'0	'46
1912	...	...	...	...	5'2	'15	'7	'32

15. An unusually large number of cases of poisoning have been admitted. Thus we find 20 cases arising from various forms of fish, meat and vegetable degradation, 4 from mushroom eating, 1 from horse bite, 1 from mauling by a leopard, 1 from a jackal, 9 from poisonous stinging insects, 1 from overdose of quinine, 1 from arsenic, 1 from oxalic acid, 2 from corrosive sublimate, 2 from chloroform and 2 from snake bite. Of the fatal cases, 1 from cyanide of potassium was suicidal, 1 from quinine was due to an overdose taken by a man working in an aerated water factory. The quinine was a concentrated preparation used in making " tonic " water, and the man took some 220 grains. Two fatal cases followed food consumption, one fatal case resulted from snake bite and two fatal cases resulted from chloroform vapour. In these last no blame or want of care is to be attributed to the anaesthetist.

16. The figures for 1912 indicate a check in that steady decline of the prevalence of venereal diseases which has been a satisfactory feature of the statistical reports in recent years. The incidence of these diseases in the various Divisions of the European Army in India, during the last five years is shown in the following table, on a basis of admissions per 1,000 of strength.

VENEREAL DISEASES.

Division.					1908.	1909.	1910.	1911.	1912.
Peshawar	...	...	...	...	41'1	34'3	38'5	36'0	51'6
Rawalpindi	...	...	...	...	44'6	52'4	34'2	33'9	34'2
Lahore	...	...	...	...	55'9	49'7	53'5	44'0	53'0
Quetta	...	...	...	...	42'5	56'8	41'8	50'0	39'1
Mhow	...	...	...	...	71'2	75'0	57'1	45'2	48'5
Poona	...	...	...	...	85'6	68'1	74'5	72'4	64'1
Meerut	...	...	...	...	56'6	73'6	63'0	49'2	48'1
Lucknow	...	...	...	...	79'2	80'7	70'3	63'7	72'7
Secunderabad	...	...	...	...	108'2	84'1	77'9	70'9	74'7
Burma	...	...	...	...	115'2	107'9	74'4	82'9	84'0
Aden	...	...	...	...	20'9	38'4	27'9	44'6	49'8

The total admissions for all forms of venereal disease during 1912, number 3,943 cases as against 3,842 in 1911. In respect of component groups, there is a decrease of 0·3 per 1,000 for syphilis, but increases of 0·4 and 2·3 per 1,000 admissions, respectively, for soft chancre and gonorrhœa. This is equivalent to a total increase of 2·4 per 1,000 admissions to hospital for all forms of venereal disease. There is, however, a decrease of 36 cases of syphilis contracted during the year and a decrease of 12·68 in the average number constantly sick for all forms of venereal disease. The admission rate for all forms of venereal disease during recent years is summarized in the following table, the ratios being in all cases per 1,000 of strength :—

INDIA.

Year.				Syphilis.	Gonorrhœa.	Soft Chancre.	All forms of Venereal Disease.
1908	...	...	...	15·8	37·9	16·1	69·8
1909	...	...	...	16·3	37·7	13·9	67·8
1910	...	...	...	14·5	33·5	10·9	58·9
1911	...	...	...	11·9	31·7	9·5	53·1
1912	...	...	...	11·6	34·0	9·9	55·5

The fifteen garrisons with a strength of not less than 200 men which furnished the highest rates for admission from all forms of venereal disease during 1912, were Mandalay, Madras, Colaba, Fort William, Darjeeling, Naini Tal, Muttra, Dinapore, Dum Dum, Jullundur, Rangoon, Bangalore, Shwebo, Jutogh and Delhi.

The invaliding rate from this class of disease shows a fall. This favourable feature is due to improved methods of treatment. The invaliding rates during recent years is shown in the following table :—

Year.		SYPHILIS.				GONORRHŒA.			
		INVALIDS SENT HOME.		INVALIDS FINALLY DISCHARGED.		INVALIDS SENT HOME.		INVALIDS FINALLY DISCHARGED.	
		Actual.	Ratio per 1,000.	Actual.	Ratio per 1,000.	Actual.	Ratio per 1,000.	Actual.	Ratio per 1,000.
1908	...	59	·86	33	·48	15	·22	9	·13
1909	...	26	·36	16	·22	8	·11	4	·06
1910	...	18	·25	17	·23	7	·10	7	·10
1911	...	10	·14	11	·15	4	·06	2	·03
1912	...	9	·13	...	...	2	·03	...	...

The following table is instructive as showing the incidence of venereal diseases, according to arms of the service :—

Year.							Venereal Diseases : Admission Ratio per 1,000.		
							Cavalry.	Artillery.	Infantry.
1908	...	...	...	...	...	...	59·6	58·8	75·4
1909	...	...	...	...	...	...	55·1	69·7	72·9
1910	...	...	...	...	...	...	48·2	58·7	64·3
1911	...	...	...	...	...	...	48·9	53·8	57·3
1912	...	...	...	...	...	...	56·1	52·4	60·7

The treatment of syphilis has been prosecuted on the most modern lines, mainly by salvarsan in conjunction with after treatment with mercury and the iodides. No untoward results occurred, which is most satisfactory. All junior officers of the Royal Army Medical Corps, on arrival in India, undergo a short refresher course of instruction in the technique employed in the intravenous injection of this drug and by this means are familiarized with the apparatus issued for that purpose to Indian hospitals. They are also made thoroughly *au fait* with the diagnosis of syphilis by the Wassermann reaction, the routine employment of which constitutes an important aid in the observation of the subsequent progress of these cases. Two deaths are recorded as attributable to syphilis. One occurred at Barian and was due to existence of a cerebral gumma. The other case was a sergeant-instructor of volunteers : he died in the civil hospital at Madras where his death is reported to have been due to a similar brain lesion. A case of death resulting from septicæmia and cardiac failure following acute gonorrhœal cystitis is also reported from Peshawar.

17. The returns under this head are the lowest on record and testify to the success of our recent policy in sending as many men as possible to the hills during the trying months of the hot season. The benefits accruing from this policy are apparent, not only in the lowest invaliding rate but also in the lowest death rate, both of which are outstanding features for 1912. The following table shows the number of cases invalided to England for the more important diseases during the period 1903-1912 :—

Table showing the number of cases invalided to England for the more important diseases during the years 1903-1912 with the actual totals.

	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
Syphilis	191	175	75	120	76	59	26	18	10	9
Malaria	244	259	126	136	274	62	76	5	7	3
Valvular disease of heart and disordered action of the heart	211	317	171	222	177	96	71	90	57	61
Debility	213	189	151	255	177	70	20	14	5	13
Tubercle of the lung	91	223	116	91	106	72	65	71*	55	47
Dysentery	59	85	37	59	49	31	16	9	9	9
Insaneness	78	115	65	64	69	53	50	37	40	28
Local injuries	62	71	51	66	62	80	35	35	39	42

* Including a case in which lung as well as peritoneum were affected.

	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
Rheumatic fever (including gout, osteo-arthritis, etc.) ...	53	44	48	40	30	27	7	4	12	14
Enteric fever	46	93	52	115	86	21	9	4	3	6*
Diseases of nervous system other than epilepsy and mental...	59	56	43	59	57	44	25	29	23	36
Perforation of membrana tympani	34	45	36	51	61	24	23	11	12	15
Diseases of respiratory system	28	64	24	39	50	30	12	16	15	9
Epilepsy	34	53	38	42	33	36	27	25	30	24
Abscess of liver	46	51	49	67	39	31	17	14	2	5
Hepatitis, including cirrhosis	32	51	14	36	21	23	4	9	4	5
Diseases of the eye other than amblyopia and errors of refraction.	32	40	29	29	29	20	16	14	12	16
Diseases of the digestive system other than hepatitis abscess, abscess of liver, cirrhosis of liver, hernia and caries of teeth.	80	80	51	56	41	24	11	11	14	9
Bilharzia hæmatobia	158	71	23	10	4	2	3	1	1	1
Diseases of the ear other than perforation of the membrana tympani.	32	39	28	38	54	44	26	36	50	29
Diseases of the circulatory system other than valvular disease of heart and disordered action of heart and varix.	32	26	23	32	20	18	2	15	10	4
Hernia	15	43	19	15	9	10	3	2	3	1
Amblyopia and errors of refraction	20	35	19	23	41	20	10	19	13	6
Gonorrhœa	21	24	8	11	21	15	8	7	4	2
Varix	15	9	5	13	9	6	2	1	5	...
Caries of teeth	6	38	14	38	31	9	3	3	6	...
Beri-beri	4	17	25	60	5	5	3	2	1	...
Anæmia	5	3	8	5	7	5	1	...	1	1
Total all causes ...	2,062	2,506	1,506	1,991	1,766	1,074	648	562	512	474

*Includes 5 from Paratyphoid A.

18. The general health of officers cannot be considered as having been good in 1912. We have had 1,362 admissions for disease in 1912 as compared with 1,365 in 1911. The chief causes of illness have been enteric and paratyphoid fevers, malaria, sandfly fever, pyrexia of uncertain origin, tonsillitis, diarrhœa and influenza. The following table compares the health of officers generally with that of the men :—

Year.	RATIO PER 1,000 OF STRENGTH.					
	ADMISSIONS.		INVALIDS SENT HOME.		DEATHS IN THE COMMAND.	
	Officers.	Non-commissioned officers and men.	Officers.	Non-commissioned officers and men.	Officers.	Non-commissioned officers and men.
1908	647·2	836·2	42·59	15·67	7·87	9·09
1909	638·5	716·9	17·86	9·06	9·58	6·25
1910	572·9	576·5	18·60	7·75	7·19	4·66
1911	582·1	524·7	15·78	7·07	8·10	4·89
1912	597·9	547·9	16·24	6·68	4·39	4·62

As in previous years, there is a marked difference between the invaliding of the two groups. The discrepancy is more apparent than real and may be accounted for mainly by social circumstance. The deaths among officers were 10 as compared with 19 in 1911. The causes of death during the period under review were, one from fracture of spine, one from concussion of brain, one from gunshot wound, one from granular kidney, one from colic, one from syncope, one from fatty degeneration of heart, one from carcinoma, one from tubercle of the lungs and one from enteric fever. There were 13 cases of enteric fever and 2 cases of paratyphoid fever among officers ; it is notable that among these only five had been inoculated. The comparative incidence of this disease among the four classes of officers, women, children and non-commissioned officers and men is shown in the following table, the ratios being per 1,000 of strength.

Enteric Fever.

OFFICERS.		WOMEN.		CHILDREN.		NON-COMMISSIONED, OFFICERS AND MEN.	
Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
6·6	·44	7·0	1·21	2·0	...	2·6	·39

19. Compared with some former years, the health of the women has not been good. Both the admission rate and death rate is enhanced. The following are the figures :—

Women. Appendix D, Tables XI and XXIII.

Year.						RATIO PER 1,000.	
						Admissions.	Deaths.
1908	...	...	...	...	...	719·7	13·53
1909	...	...	...	...	...	596·7	7·67
1910	...	...	...	...	...	504·7	6·28
1911	...	...	...	...	...	495·8	7·30
1912	...	...	...	...	...	510·5	9·16

There were 38 deaths among the women as against 31 in 1911. These included 5 from enteric fever, 3 from cholera, 4 from tuberculosis, 3 from valvular disease of heart, 1 from heatstroke, 1 from small-pox, 1 from dysentery, 1 from chloroform vapour and 1 from burns.

For purpose of comparison the following table is submitted. It shows the incidence and death rate prevailing among the women and men in respect of the four

chief groups of disease. Only in respect of malaria and pyrexia of uncertain origin are the figures in favour of the women.

Year.	ADMISSION RATIO PER 1,000 OF STRENGTH.							
	ENTERIC FEVER.		DYSENTERY.		MALARIA FEVER.		PYREXIA OF UNCERTAIN ORIGIN.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
1908	14'6	13'3	14'4	10'0	244'6	86'3	74'1	18'4
1909	8'9	10'2	11'2	6'9	202'8	69'5	61'3	28'1
1910*	4'6	6'5	7'7	5'3	132'0	34'8	37'7	15'0
1911*	3'8	6'4	7'7	7'1	90'2	26'1	26'4	8'0
1912*	2'6	7'9	5'2	5'8	82'4	22'4	21'2	10'4

* Including Paratyphoid A. and B.

20. Taken as a whole, the health of the children in barracks has not been good. Both the admission rate and death rate for all causes are higher than last year. In 1912 the former was 389'6 and the latter 33'49; the corresponding figure in 1911 were 370'6 and 30'33, all per 1,000. There has been a reduction in the prevalence of measles, dysentery and enteric fever, but an increase in respiratory diseases and small-pox. The following table shows the essential facts as to this class:—

Year.				ADMISSION RATIO PER 1,000 OF STRENGTH.				
				Small-pox.	Measles.	Enteric Fever.	Dysentery.	Respiratory Diseases.
1908	...	...	...	1'4	32'7	3'6	8'1	38'8
1909	...	...	...	1'0	25'2	5'8	7'4	53'9
1910	...	...	...	Nil	12'1	3'3	6'1	41'2
1911	...	...	...	1	66'6	4'3	5'7	31'9
1912	...	...	...	2'1	19'2	2'0	3'1	49'5

SECTION II.

INDIAN ARMY.

(CONTRIBUTED BY THE DIRECTOR, MEDICAL SERVICES IN INDIA.)

21. There has been no unusual ill-health amongst Indian troops during the year. The average present strength including those on duty outside India was 132,232 as compared with 131,213 in 1911. The marginal table gives concisely the rates for the years 1912 and 1911 and of the previous five years. The admission rate is somewhat higher than in 1911, and is probably accounted for entirely by greater attention being paid to what have been previously reckoned as negligible complaints, such as fever of uncertain origin (3 days fever), sandfly fever and diarrhoea, which used to be treated in the lines but are now admitted to hospital. The death rate as shown is rather lower than in 1911, and if the deaths that occurred while on sick leave and furlough are taken into account, which is not the case in the table, the difference is more marked, 5·66 in 1912 as against 6·78 in 1911.

Indian troops.	ALL CAUSES. RATIOS PRR MILLE.		
	1906-10.	1911.	1912.
Admissions	628·2	515·8	547·5
Constantly sick,	21·9	19·8	20·1
Deaths ...	6·14	4·48	4·42
Invalids	6·07	4·43	4·61

The following table shows the death rates per 1,000 among Indian and British troops since 1880 compared with that of British troops serving in India. As the first column is calculated on present strength, *i.e.*, shows the monthly fluctuation due to men on furlough, it cannot be considered as so nearly comparable as the second column is to the third relating to European troops, as the present strength of the latter of necessity shows no appreciable difference from enrolled strength on which the figures given in the second column are calculated. From 1904 to 1908 the decrease in mortality in the two armies was decidedly more noticeable in the Indian army than in the British and sufficiently too from 1908 to be worthy of record ; now, however, the actual ratio of advance has been reversed and the lead has been unmistakably given to the latter.

INDIAN TROOPS.				BRITISH TROOPS.	INDIAN TROOPS.				BRITISH TROOPS.	INDIAN TROOPS.				BRITISH TROOPS.
Years.		Mortality excluding absent deaths.	Mortality including absent deaths.	Death rate per 1,000.	Years.		Mortality excluding absent deaths.	Mortality including absent deaths.	Death rate per 1,000.	Years.		Mortality excluding absent deaths.	Mortality including absent deaths.	Death rate per 1,000.
1880	...	39·22	41·12	24·85	1891	...	15·44	19·34	15·89	1902	...	11·16	15·01	14·68
1881	...	19·24	22·62	16·86	1892	...	14·97	18·67	17·07	1903	...	10·04	16·62	13·05
1882	...	12·24	14·76	12·07	1893	...	10·29	12·81	12·61	1904	...	8·46	12·08	10·83
1883	...	11·76	14·31	10·88	1894	...	10·76	13·59	16·07	1905	...	8·09	9·50	10·05
1884	...	10·50	12·22	12·56	1895	...	11·60	15·71	15·26	1906	...	6·57	8·58	10·43
1885	...	13·67	16·09	14·55	1896	...	10·20	12·57	14·84	1907	...	6·27	8·51	8·18
1886	...	13·27	19·46	15·18	1897	...	13·12	14·90	22·93	1908	...	7·41	8·49	9·78
1887	...	11·68	18·17	14·20	1898	...	11·07	13·33	20·05	1909	...	5·62	6·42	6·25
1888	...	12·84	16·14	14·84	1899	...	10·70	14·50	12·75	1910	...	4·89	7·12	4·66
1889	...	12·94	16·19	16·60	1900	...	14·04	18·57	14·62	1911	...	4·48	6·78	4·89
1890	...	15·91	18·64	13·84	1901	...	10·68	13·89	12·38	1912	...	4·42	5·66	4·62

The chief causes of sickness in order of importance were malaria, pyrexia of uncertain origin, respiratory diseases and dysentery, and the chief causes of death were pneumonia, enteric fever, malaria and tubercle of the lungs.

There were 609 invalided as compared with 581 in 1911, chiefly for tubercle, anæmia, debility and venereal disease.

In comparison with European troops the Indian troops showed much less tendency to suffer from hepatic complaints and venereal disease, but on the other hand a greater proneness to malaria, tubercle of the lungs, pneumonia, respiratory diseases and dysentery.

22. There was a greater amount of sickness in the Northern than in the Southern Northern and Southern Army—the admission rate of the one showing an excess of Armies; Divisions, Appendix A., Table XIII. 128 per 1,000 over the other. This may be looked upon as normal, but the death rate has not, as has usually been the case, followed this course as the Northern Army showed a decrease over the other of .33 per 1,000, mainly due to less mortality from cholera and plague.

The Divisions of the Army showing the least favourable death rates were those of Poona, Meerut, Lahore and Secunderabad. The chief causes of mortality in the Poona Division were pneumonia, enteric fever and cholera; in the Meerut and Lahore Divisions they were pneumonia, enteric fever and tubercle of the lungs; and in the Secunderabad Division cholera and enteric fever.

The three Divisions with the lowest mortality were Burma, Rawalpindi and Peshawar; in the Burma Division there was a reduction in the mortality rate of 74 per cent. on 1911.

Stations outside of India.

The accompanying table complements to some extent the information given in Table XV:—

— —			Average strength.	Admission rate.	Death rate.
Aden Brigade	...	...	862	550	3.48
Persian Gulf	...	...	1,117	556	3.58
Colombo and Singapore	...	...	1,573	539	7.63
Tien-tsin and Hong-Kong	...	...	4,218	451	6.16

The strength of the Aden Brigade varied but little on that of previous years. There was a decided improvement in the health of the troops as shown by the admission and death rates, most marked in Aden proper where the admission rate was 572.2 as against 807.0 in 1911. The chief ascertained causes of sickness were dysentery and respiratory diseases. It will be noticed that the death rate 3.58 in the Persian Gulf was under that for India generally, a great change on the previous year when it was 9.45. The admission rate too showed an appreciable reduction, though at Jask it was very high being no less than 11.30 per mille, the chief factors in this result were dysentery and scurvy.

The sickness generally in the China stations as compared with that in India was considerably less; but the death rate was high both as compared with the general Indian rate and with that of China in 1911. This was due to an increased mortality from respiratory diseases and tubercle of the lungs, especially at Tien-tsin where the death rate rose to 7.47 as against 1.16 in 1911.

23. As regards geographical groups those of Bengal and Orissa and Assam Geographical Groups. Appendices B. and C., Table XIV. suffered more heavily from sickness than others: the chief cause was malaria.

24. In 1912, 38 stations in India had an average strength of over 1,000; amongst Stations, Regiments, Tables XV and XVI. these the rates of admission were very high in Dera Ismail Khan (1,065), Lahore Cantonment (968), Jullundur (835) and Peshawar (814), and the death rates in Bakloh (10.87), Dehra Dun (10.61), Aurungabad (8.32) and Secunderabad (7.31).

The chief ascertained cause of sickness at Dera Ismail Khan, Lahore and Peshawar was malaria. The high death rates at Bakloh and Dehra Dun were due to pneumonia and tubercle of the lungs, at Aurungabad to enteric fever and at Secunderabad to cholera.

The regiments which suffered most severely from sickness during the year were the 1-2nd Gurkha Rifles at Dehra Dun, the 32nd Lancers at Jubbulpore, the 34th Poona Horse at Aurangabad and the 41st Dogras at Cawnpore and Bareilly. The admission and death rates of these regiments were as follows :—

	Admission rates.	Death rates.
1-2nd Gurkhas, Dehra Dun	391·1	16·30
32nd Lancers, Jubbulpore	480·4	15·69
34th Poona Horse, Aurangabad	699·8	15·59
41st Dogras, Cawnpore and Bareilly	306·5	14·66

25. There were 85 cases of cholera with 38 deaths as against 16 and 14, respectively, in 1911. Of these 57 cases with two deaths were returned from Secunderabad (28) Cawnpore (18) and Baroda (11). In the case of Secunderabad the origin of the infection was not discovered—the disease was, however, prevalent in the city. In the other two outbreaks the infection was brought by sepoys returning from leave: in the Cawnpore case from a village near that city, and in the other probably from a railway station in the Poona district where there was cholera. In the Baroda outbreak the sepoy arrived on the 15th May—he was six hours ill in the lines before coming into hospital on the afternoon of the 16th and in the meantime had used and fouled several of the regimental latrines. A sweeper woman and two sweeper children were the first to contract and die of the disease, and it was thought that the contagion was taken from the latrines to the lines, probably on the men's feet and hands. The latrines were vacated and cleansed and trenches used in their stead, with the result that there was no further case. The wells used in the lines were closed and the men made to drink pipe water only, as a precautionary measure, but it was not thought that the water was contaminated, as had it been, the disease would have been much more extensively prevalent and would not have been confined to one wing.

26. The total number of admissions from small-pox was 64 as against 36 in 1911. There were only 3 deaths. No individual regiment returned more than four cases and the disease was not confined to any particular portion of the army.

27. There were 11,752 admissions and 35 deaths from malaria as compared with 13,778 and 55, respectively, in 1911. The admission and death rates fell from 105 per 1,000 to 89 and from ·42 to ·26, respectively. The cause for the reduction may be mainly attributed to a more favourable year, though no doubt the anti-malarial measures that are being strenuously carried out in all cantonments played some part.

The heaviest admission rates (in stations where the average strength was above 150) occurred in Port Blair (530 per 1,000), Dera Ismail Khan (404), Alipore (370), Delhi (368) and Fort Dufferin (354).

The 27th and 72nd Punjabis at Dera Ismail Khan, returned 293 and 503 cases, respectively. This station is threatened by the Indus and the question of removing the cantonment to Tank is under consideration.

The 40th Pathans, which furnished 270 admissions from malaria at Alipore, came from Dera Ismail Khan early in the year where it had had 914 admissions in 1910 and 380 in 1911 due to malaria. In 1911, though the cases were

fewer the type had been much more severe necessitating prolonged treatment in hospital: of the number examined 78 were of the benign and 94 of the malignant tertian variety. During the year under report, of those cases of which the blood was microscopically examined, 37 were of the benign and 21 of the malignant tertian type. In December, it was found that close on 400 men suffered from enlarged spleen. These facts would seem to indicate that Dera Ismail Khan, and not Alipore, was responsible for the large amount of sickness from malaria in this regiment. It is important to note that the whole regiment slept under mosquito nets and that the prophylactic use of quinine was commenced in June and carried on throughout the year.

At Port Blair, the detachment of the 93rd Burma Infantry suffered severely whilst out in musketry camp, due it is stated, to the presence of an anopheline infected nullah 50 feet below the site on which the camp was pitched. Steps were taken to clean the nullah and to destroy the larvae of the mosquito, and on return to headquarters at Ross Island the epidemic practically stopped.

At Delhi, the 33rd Punjabis had 353 admissions, and of those cases of which the blood was examined microscopically, 78 per cent. were due to the presence of the benign and 20 per cent. to the malignant tertian variety of the parasite. The cavalry regiment (11th Lancers) stationed at Delhi suffered relatively very little. There can be no doubt but that the excessive amount of sickness from which the infantry suffered was due to the position of their lines at Daryaganj near the swampy *bea* of the Jumna and to the proximity of a crowded malaria-stricken population in the neighbouring bazaar.

The 91st Punjabis located in Fort Dufferin at Mandalay had 388 admissions from malaria. The previous year had been a bad one for this disease, the regiment as a whole had made a good recovery and there would not probably have been an unusual amount of malaria in 1912, but for the fact that two double companies were out in camp at Sitha in the hills near Maymyo, where owing to a case of measles occurring amongst them they were kept after the rains had broken.

28. There were 5,831 cases and 15 deaths attributed to "Pyrexia of uncertain origin" as against 4,066 cases and 11 deaths in 1911. Pyrexia of uncertain origin. Appendix B., Tables XIII to XV and XIX. As this term includes all cases of fever not diagnosed, it would seem of little use discussing the question of location or prevalence except with a view to accentuating the necessity of increased research into the origin of the different diseases included in it. In Drosh, 430 cases were returned under this heading from the 26th Gurkha Rifles, 365 of which the medical officer attributed to sandfly fever, and similarly the medical officer, 53rd Sikhs at Jullundur, 423 cases. Captain Woods, medical officer, 53rd Sikhs, describes this disease as lasting 2 to 8 days accompanied by intense pain in the back, great prostration, headache varying in severity, with slow convalescence and frequent relapses. He says further that evacuation of barracks, change of camp and final departure from the station had no appreciable effect on the incidence of the disease.

The medical officer, 94th Russell's Infantry, Baroda, returned 229 cases with like symptoms. He states that the disease coincided with an invasion by sandflies not previously found in this station. The blood of all cases was examined microscopically for malarial parasites with a negative result.

From the 18th Infantry at Aden 146 admissions were returned which the medical officer described as identical with 7-day fever (Rogers). He believed that bed bugs, which were present in enormous numbers in the barracks, had some causal relation to the disease.

The medical officer, 91st Punjabis at Fort Dufferin, in an interesting report suggests that the majority of the cases returned under this unsatisfactory heading are really due to malaria in which it had not been possible to discover the parasite microscopically and in which the clinical signs did not warrant a diagnosis of that disease.

29. In the year under report, there were 1,316 cases of sandfly fever reported as such as against 114 in 1911. The majority of cases returned were reported from Northern India, especially from Meerut (517) and Jullundur (271). The epidemic occurred about

the end of the rains, coinciding more or less with the ordinary malarial season. There would seem to be little doubt but that the increased number of cases returned in 1912 was due mainly to greater attention being paid to slight cases of fever, which in former years would either have escaped notice and would not have been admitted to hospital, or would have been included under other heads.

30. In 1911, there were 302 admissions with 55 deaths, and in 1912, 243 admissions with 62 deaths from enteric fever. As compared with European troops the ratio per 1,000 of strength for admissions was 1·8 Indian as against 2·6 European troops and for deaths 47 as against 39. The higher mortality for this disease amongst Indian troops is most probably due mainly to very little protection by inoculation, though to some extent to the want of proper nursing in Indian troops hospitals.

Enteric Fever Appendices A, B and D., Tables XIII to XV and XVII.

The 1-3rd Gurkha Rifles at Almora reported 13 cases with 3 deaths; out of these 5 were contracted at Almora and 6 at Naini Tal.

The 34th Horse at Aurungabad had 12 admissions and 4 deaths. The whole regiment was inoculated on the outbreak of the disease. The infection was believed to be due to the water supply.

From Secunderabad the 6th Jats reported 12 cases and 3 deaths. It was thought, however, on a diagnosis being made that others, returned as pyrexia of uncertain origin, had been mild cases of the disease. It seems that owing to the cantonment water supply being cut off, this and other regiments had to use wells up till then out of use, and as a result it was thought the infection was probably due to this, though the water had been boiled before issue.

The 59th Scinde Rifles, quartered at Kohat, had 11 cases and 1 death. Captain Husband, I.M.S., the medical officer in charge of the regiment, after an exhaustive analysis of all likely causes, believed the outbreak to be most probably due to the water of a polluted stream that runs through the lines and is used by the men for washing purposes when resorting to mosques and temples situated on its banks.

The 116th Mahrattas at Jhansi had 9 cases and 1 death. The origin was attributed to a sepoy who was admitted to hospital after his return from leave from the Deccan, as 5 of the cases that followed had arrived at the same time and had been with him in the segregation camp: the actual infection was thought to be by flies.

31. There was a great increase in cases reported as due to dengue—398 cases as against 2 in 1911. The regiments mainly affected were the 40th Pathans (273) and the 75th Carnatic Infantry (48) at Calcutta and the 2-10th Gurkha Rifles (34) at Takdah. The medical officer of the 40th Pathans, Captain Kennedy, I.M.S., in a full and convincing report makes out a good case for his diagnosis of the disease; there is, however, considerable doubt as to whether the cases reported from Takdah were of the same nature. The actual cause of the disease was not identified—it was thought in Calcutta that a culex variety of mosquito might be the medium of infection—this could not have been the case at Takdah as the insect is not found there.

Dengue. Table XXXIII.

32. There were 65 cases of mediterranean fever with 3 deaths as against cases 24 and 3 deaths in the previous year. The 10th Lancers at Jullundur (19 cases, 2 deaths) the 28th Punjabis (15 cases) and the 37th Lancers (14 cases, 1 death) both at Lahore, furnished 48 out of the 65 cases and 3 deaths. The epidemic amongst the 10th Lancers commenced at the end of 1911 in which year there were 13 cases amongst sepoys and 7 amongst followers: the outbreak was then chiefly amongst Mahomedans. Goat's milk was used in all these regiments but in no case could the disease be traced to a goat. The medical officer of the 37th Lancers had the blood of a large number of horses, cows and goats examined with negative results, except as to one cow whose blood gave agglutination up to 1 in 400—the micro-organism was not, however, isolated from its milk. It was elicited that the milk of this cow could have been the source of infection in a number of the cases.

Mediterranean fever Table XXXIII.

33. There were fewer cases of plague; 28 admissions and 18 deaths as against 95 admissions and 35 deaths in 1911. A very considerable amount of inoculation against the disease, and especially where it was present, was done, and in one regiment affected, the 105th Mahratta Light Infantry at Poona, (returning 5 cases and 4 deaths) all sepoys, followers, women and children were inoculated twice in the year.

34. There were 149 cases of scurvy of which number the 7th Rajputs (22) in the Persian Gulf, the 120th Rajputana Infantry (21) at Belgaum and the 18th Infantry (21) at Aden, furnished 64 cases. There was a difficulty in obtaining a supply of vegetables both in the Gulf and at Aden, the potatoes on which the troops relied principally at Jask having to be obtained from Karachi, and then were not always available; nor could fresh milk be obtained.

35. As to tubercle of the lungs the ratios per 1,000 of strength were as a whole much the same. The table below will show that there was during the year some slight increase in mortality from this cause.

TUBERCLE OF THE LUNGS. RATIO PER 1,000.									
Year.				ARMY OF INDIA.		GURKHAS.		EXCLUDING GURKHAS.	
				Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
1901	...	...	...	4.2	.84	13.1	3.95	3.4	.57
1902	...	...	...	4.3	.80	15.6	4.24	3.2	.47
1903	...	...	...	5.9	.68	28.9	2.88	3.3	.44
1904	...	...	...	3.9	.51	10.6	2.66	3.2	.28
1905	...	...	...	3.1	.50	6.1	1.58	2.7	.37
1906	...	...	...	2.5	.52	5.2	2.41	2.2	.29
1907	...	...	...	2.5	.33	4.8	1.03	2.3	.24
1908	...	...	...	3.0	.42	5.0	1.43	2.7	.28
1909	...	...	...	2.3	.39	4.0	1.33	2.1	.26
1910	...	...	...	2.4	.19	3.6	.50	2.3	.15
1911	...	...	...	2.1	.21	3.6	.70	1.9	.14
1912	...	...	...	2.0	.24	4.1	.84	1.7	.16

36. There was less pneumonia in the army, 6.6 admissions per mille and .83 deaths, as compared with 7.5 and .98 per mille, respectively, in the previous year.

The stations principally affected were Abbottabad (41 cases and 6 deaths), Lansdowne (24 cases and 2 deaths), Quetta (23 cases and 4 deaths), Bombay and Santa Cruz (20 cases and 4 deaths) and Dharmasala (17 cases and 3 deaths). It will be noticed that these cantonments are mainly situated in the hill stations group and the regiments mainly affected were Gurkhas. It should not, however, be assumed from this that Gurkhas are peculiarly prone to pneumonia as they are no doubt to tubercle. The regiments at the Malakand, a very exposed hill station, consisting of the 19th and 69th Punjabis, suffered badly and at Quetta other regiments suffered more than the Gurkhas quartered beside them.

The infantry regiments at Bombay and Alipore were saturated with malaria, the 40th Pathans at the latter place especially so, and no doubt this predisposed the men to pneumonia.

37. There was a marked decrease in the number of cases of dysentery as compared with 1911, 2,208 to 2,971, corresponding more or less with the decrease in sickness from malaria.
 Dysentery. Appendices A, B. and C., Tables XIII to XV, and XXI.

The highest admission rates were reported from Jask in the Persian Gulf (640.0), Baroda (88.7), Santa Cruz (85.8), Bombay (69.5) and Ahmedabad (56.2).

The 7th Rajputs, quartered at Jask with detachments scattered up and down the Gulf, returned 156 cases, mostly occurring at headquarters in three companies. It was suggested that the larger incidence on a limited portion of the regiment was due to the nearness of the cook-houses to the latrines of two of the companies affected, at Ahmedabad before leaving India, producing "carriers" who infected others at Jask through the medium of flies. The disease was considered to be predisposed to by insufficient cooking and to the presence of scurvy in the regiment.

38. There were 1,907 admissions and 7 deaths attributed to venereal disease as against 1,950 admissions and 4 deaths in the previous year. The stations most affected were Hong Kong (160), Dehra Dun (148), Poona (99), Bangalore (76) and Secunderabad (63).
 Venereal diseases. Appendices B. and F., Tables XIII to XV.

39. Included under the head injuries and poisons are 11 cases of suicide. The means selected to produce death were in 4 cases by gunshot, 2 each by poisoning by arsenic and opium, 1 each by hanging and cut-throat, and 1 by being run over on the railway.
 Suicides. Table XXXIII.

40. The average strength of commissioned British officers with Indian troops in India during 1912 was 1,868, and among them there were 783 admissions to hospital with 8 deaths, as compared with an average strength of 2,014, admissions to hospital 801 and 9 deaths during 1911.
 Commissioned British Officers.

The greatest number (105) of admissions was due to malaria. There were 12 cases of enteric fever, 24 of dysentery, 8 of appendicitis, 1 of abscess of liver, 133 of local injuries, 9 of concussion of brain and 4 of small-pox admitted during the year.

The admission and death rates from enteric fever as compared with British troops and officers serving with them are as follows: British officers attached to Indian troops—admission rate 6.4 and death rate .54; British officers with British troops—admission rate 6.6, death rate .44; British troops—admission rate 2.6 and death rate .39. In this connection it is pointed out that inoculation against enteric has not become as general amongst officers as men.

The 8 deaths were due to the following causes: enteric fever 1, pneumonia 1, appendicitis 1, abscess of liver 1, gunshot wound of heart 1, small-pox 1, meningitis 1 and ulceration of intestines 1.

Steps have been taken to obtain more accurate information of the statistics of British officers attached to Indian units, by rendering it easier for civil surgeons to report all cases of illness, which come under their care amongst these officers, while on leave or away from their units on duty.

SECTION III.

GENERAL POPULATION.

41. January 1912 exhibited very unsettled weather conditions in north-west India and Lower Burma: over the rest of India the climate was drier than normal. In February, on the other hand, the rainfall was in defect all over the north of the Peninsula, the usual area of winter rains, whereas in Central India the rainfall was generally in excess. Temperature and humidity were approximately normal in most divisions of India during these two months in spite of the unusual distribution of the rainfall.

The hot weather months, March to May, were characterised in the extreme north of India by the inruption from the west of a series of disturbances of the cold weather type. Though these did not result in much rain, they delayed appreciably the establishment of hot weather conditions. There were no signs of the monsoon during May on the west coast of the Peninsula. The rainfall in the east of the Peninsula was in defect. A short spell of exceptionally hot weather was experienced in the Punjab, Sind and Rajputana in May.

The monsoon was late in becoming established, but the rain it brought differed from the normal by less than 20 per cent. over the greater part of the country. The rainfall of the whole period, June to September, was 1·7" or 5 per cent. in defect in the plains of India. This compares favourably with the monsoon period of 1911 when the defect was 4" or 11 per cent. Temperature and humidity approximated the normal in most parts of India during this monsoon period.

The months of the retreating monsoon, October to December, had a rainfall in the plains of India of 14 per cent. above normal. Humidity, cloud and temperature in most parts of the country showed no important deviations from the normal.

The total rainfall of the year 1912 was approximately normal, the total precipitation having been only 1" or about 2 per cent. in defect.

From the agricultural point of view the year was a prosperous one. The wheat crop yield was 19·2 per cent. above the average of the preceding five years, though less than that of the record year 1911. The rice crop was also very good except in Bihar and Orissa. Sugar-cane yielded a record outturn, 20 per cent. above the average of the preceding quinquennium.

The year ended with excellent prospects for the spring crops in most parts of the country.

42. The following table gives the number of births and deaths registered in each of the several provinces of British India during 1912.

Births and deaths.

Province.	BIRTHS.			TOTAL DEATHS.			RATIO OF DEATHS PER 1,000 OF POPULATION.			MEAN DEATH RATE DURING PREVIOUS FIVE YEARS.		
	Total number.	Ratio per 1,000 of population.	Mean ratio during previous five years.	In municipalities and towns.	In districts excluding towns.	Total.	In municipalities and towns.	In districts excluding towns.	Total.	In municipalities and towns.	In districts excluding towns.	Total.
Delhi	18,105	46·03	38·05	10,023	5,420	15,443	43·74	33·01	39·26	55·34	55·27	55·29
Bengal	1,600,335	35·30	34·83	71,148	1,278,631	1,349,779	24·47	30·14	29·77	24·73	29·31	29·02
Bihar and Orissa	1,458,293	42·52	39·09	35,892	1,027,536	1,063,428	29·97	31·04	31·01	32·24	35·39	35·28
Assam	194,676	32·16	31·90	2,501	149,055	151,556	20·80	25·13	25·04	22·20	27·16	27·06
United Provinces of Agra and Oudh.	2,125,585	45·38	39·36	106,037	1,294,770	1,400,807	34·36	29·56	29·91	47·82	43·12	43·43
Punjab	876,125	45·3	41·5	54,473	460,563	515,036	31·94	26·12	26·63	43·53	42·63	42·71
North-West Frontier Province	75,653	37·1	33·7	4,347	43,402	47,749	22·73	23·46	23·39	28·13	27·98	27·91
Central Provinces and Berar	671,298	48·24	46·38	58,280	531,005	589,285	47·60	41·84	42·34	41·85	33·29	34·04
Madras Presidency	1,245,465	30·9	32·1	138,005	844,303	982,308	28·6	23·8	24·3	28·9	23·3	24·0
Coorg	4,606	26·32	26·35	610	6,073	6,713	64·12	36·81	38·37	53·50	33·39	34·59
Bombay Presidency	684,890	34·97	35·53	113,522	569,688	683,210	41·48	33·80	34·88	36·62	27·69	29·20
Burma { Upper	202,197	31·68	33·71	29,874	136,079	165,953	37·23	24·38	26·00	39·69	24·74	26·64
{ Lower	114,457	32·96	35·69	13,016	87,520	100,536	44·05	27·54	28·95	42·91	27·69	29·30
Ajmer-Merwara	23,609	47·08	40·35	Not available	Not available	19,178	Not available	Not available	38·25	Not available	Not available	43·02
British India	9,295,296	38·95	38·04	637,758	6,434,055	7,090,991	33·07	29·40	29·71	36·48	35·40	34·28

The birth rate for British India as a whole rose from 38·58 in 1911 to 38·95 per mille for the year under report. Both these figures are slightly above the mean ratio for the previous quinquennium, 38·04. As usual, the Central Provinces returns the highest birth rate and Madras, excepting the small province of Coorg, the lowest. The most noteworthy rise is that of the United Provinces where the birth rate was six per mille above the quinquennial average.

The fall of the death rate of British India from 32·01 in 1911 to 29·71, and from a mean ratio for the previous five years of 34·28, is evidence of the comparative healthiness of 1912. It is the lowest death rate that has been recorded since 1901 when it was 29·46. Madras has the lowest death rate and the Central Provinces the highest. The increase of population was most marked in the Punjab and the United Provinces where the excess of births over deaths amounted to the large rates of 18·67 and 15·47 per mille of the population, respectively. In Bombay the birth and death rates were approximately equal. Only in Coorg did the death rate exceed the birth rate.

43. The deaths from the chief causes of mortality are shown in the following table :—
Chief diseases.

Province.	CHOLERA.		SMALL-POX.		PLAGUE.		FEVERS.		DYSENTERY AND DIARRHŒA.		RESPIRATORY DISEASES.		ALL OTHER CAUSES.	
	Total deaths.	Ratio per 1,000.	Total deaths.	Ratio per 1,000.	Total deaths.	Ratio per 1,000.	Total deaths.	Ratio per 1,000.	Total deaths.	Ratio per 1,000.	Total deaths.	Ratio per 1,000.	Total deaths.	Ratio per 1,000.
Delhi	406	1'03	517	1'31	97	'25	9,687	24'63	288	'73	3,360	8'54	1,088	2'77
Bengal	95,467	2'10	8,237	'18	1,995	'04	959,193	21'16	27,335	'60	10,352	'22	247,150	5'45
Bihar and Orissa	77,023	2'24	2,357	'06	58,324	1'70	644,926	18'80	26,022	'75	6,497	'18	248,279	7'24
Assam	14,303	2'36	4,696	'77	...	...	78,318	12'91	13,241	2'19	3,458	'57	37,550	6'21
United Provinces of Agra and Oudh.	18,894	'40	3,101	'07	114,945	2'45	967,500	20'66	14,986	'32	12,810	'40	252,571	5'61
Punjab	1,833	'09	30,339	1'57	29,805	1'54	275,040	14'22	9,785	'51	41,447	2'14	126,781	6'56
North-West Frontier Province.	1,329	'65	2,017	'99	1	'0005	32,877	16'11	289	'14	1,536	'75	9,702	4'75
Central Provinces and Berar.	34,313	2'46	4,556	'33	19,199	1'38	270,162	19'41	58,825	4'23	44,729	3'21	157,501	11'32
Madras Presidency	92,497	2'3	16,024	'4	6,651	'2	306,471	7'6	71,913	1'8	38,616	'9	450,066	11'2
Coorg ... ..	...	...	53	'30	9	'05	5,597	32'56	231	1'32	75	'43	648	3'70
Bombay Presidency	64,505	3'29	6,331	'32	28,984	1'48	286,321	14'62	57,039	2'91	70,712	3'61	169,318	8'64
Burma { Lower	6,013	'94	6,117	'96	2,564	'40	53,287	8'35	9,453	1'48	5,220	'81	83,289	13'05
Upper	1,173	'34	1,842	'53	450	'13	32,683	9'41	2,248	'65	2,527	'73	59,616	17'17
Ajmer-Merwara	13	'03	3,050	6'08	13	'03	13,926	27'77	551	1'10	397	'79	1,228	2'45
British India { 1912	407,769	1'71	89,357	'37	263,037	1'10	3,936,085	16'49	292,216	1'22	247,736	1'04	1,854,787	7'77
1911	354,005	1'48	58,535	'25	733,582	3'07	4,207,356	17'63	253,636	1'06	223,822	'94	1,838,608	7'58

Plague, of all the causes of death, shows the most marked decrease in the mortality rate as compared with the previous year. There were little more than one-third the number of reported deaths from plague in 1912 that there were in 1911, the ratios per mille for British India being 1911, 3·07; 1912, 1·10. All provinces shared in this lessened plague mortality; it was most marked in the Punjab where the death rate fell from 8·89 per mille in 1911 to 1·54 in the year under report.

The deaths reported from “fevers,” a comprehensive designation which includes malaria and many other diseases, were fewer than in 1911; the death rates from “fevers” for the last three years were 1910, 19·17 per mille; 1911, 17·63; 1912, 16·49. The progressive nature of this decrease is most satisfactory.

Of other diseases cholera was slightly more prevalent than in 1911 though less so than in 1909. Bombay had the highest provincial cholera death rate, 3·29 per mille; in Bombay cholera was responsible for more than twice the number of deaths caused by plague, whereas in the previous year the plague mortality was seventeen times higher than that due to cholera.

All provinces, except Madras and Coorg, had an increased mortality from small-pox in 1912 as compared with the previous year. Ajmer-Merwara had a small-pox death rate of 6·08 per mille; the Punjab came second with a ratio of 1·57. Deaths from dysentery and diarrhoea were more numerous than in 1911. The highest death rate was as in the previous year returned for the Central Provinces where this cause of mortality was responsible for a death ratio of 4·23 per mille (3·15 in 1911).

44. The birth rate of the city was 43·70 per mille. The birth rate was slightly lower than the death rate which was 43·74 per mille.

Delhi City.

No disease assumed an epidemic form. Cholera caused 103 deaths. September was the month of greatest cholera prevalence when it caused sixty deaths. Plague was responsible for twenty deaths. Rat destruction was carried out most energetically, the average number of rats destroyed per month being 35,000. This indicates a high rat population in the city. Fevers caused 6,588 deaths.

Delhi has an unenviable reputation for malaria; a very thorough malaria survey of the city and its environs has recently been completed. A new Health Department was created during the year for the city and is now under the control of a qualified Indian Medical Service officer. The increased activity in sanitary measures can confidently be expected to bring about in the near future a great amelioration in the unsatisfactory health conditions of the city. The temporary capital on the north of the city and the Imperial city now in course of construction are in the sanitary charge of two additional health officers.

45. The birth rate rose from 34·97 per mille in 1911 to 35·30 in 1912. The excess of births over deaths was approximately 250,000.

Bengal.

Rajshahi heads the list of divisions from the point of view of the birth rate with a ratio of 37·70; it also has the highest death rate 32·70. Considering both births and deaths Chittagong is the healthiest division of Bengal; it had a birth rate of 37·26 and a death rate of 24·66. Five districts had birth rates of over 40 per mille. The highest birth rate in towns was registered in Kurseong, 38·93 per mille. Excluding the Burdwan and Presidency divisions, the birth rates were higher everywhere than in 1911. Of the 112 towns in the Presidency, in 65 the death rate during 1912 was in excess of the birth rate. Excessive infantile mortality (which in Manicktola reached the terribly high figure of 573·99 per mille), the large disproportion of the sexes in some towns and the unusually severe prevalence of cholera and fever were chiefly responsible for this. In 29 rural areas the birth rates were over 45 per mille. Tollyganj which heads the list, returns a birth rate of 106·95 per mille. Fewest births were registered during the five months May to September.

The death rate rose from 26·94 per mille in 1911 to 29·77 in the year under review, 128,199 more deaths being reported than in 1911. All the causes of mortality showed an enhanced death rate. The highest district death rate was returned by Malda, 43·36 per mille. Mortality from all diseases, except small-pox and fever, was larger in urban than in rural areas and in both the death rate from every cause was larger than in 1911.

There was a rise in the infantile mortality rate; 182,258 males and 157,521 females died during the first year of life; these figures represent rates of 220·6 and 203·4 per mille of the births, respectively, as against 205·3 and 184·8 in 1911.

Cholera mortality was considerably higher than in 1911. The disease was very widespread. The total deaths were 95,467 as compared with 67,750 in the preceding year. There was a slight rise in the mortality from small-pox, the mortality was, however, only half the average of that during the preceding quinquennium. The ratios were ·18 in 1912, ·17, 1911 and ·36 average 1907-11.

Excepting Calcutta and its suburbs, Bengal was practically free from plague. There were 1,995 deaths from plague as compared with 1,879 in the previous year. Deaths from "fevers" show an increase both on the previous year's figure

and the average of the preceding quinquennium, the ratios being 21·16, 19·46 and 20·55 per mille, respectively. "Fevers" were responsible for 71 per cent. of the mortality from all causes. In 1912 the percentage was 72. Dysentery and diarrhœa also show an enhanced mortality rate and, as usual, caused a much larger mortality in towns than in rural areas.

During the year 147,559 births and 90,547 deaths were enquired into by the vaccination staff. Of the former 3·09 per cent. and of the latter 2·57 per cent. were found not to have been registered at the thana. In Bakarganjas many as 11·75 per cent. of births and 6·23 per cent. of deaths escaped registration. In Faridpur 9·52 per cent. of births and 9·40 of deaths were unregistered. These figures reveal a very unsatisfactory state of affairs.

46. The death rate in Calcutta during 1912 was 28·1 per mille. Though higher than the rate, 27·2, recorded in 1911, the figure is evidence of the continued improvement in the sanitary condition of the city. The above death rates are of course crude. The characteristics of the population with its excess of males and the large number of young adults amongst the males, are factors of importance in determining the low death rate of the city. Cholera was more severe than in the previous year. Plague, cholera and small-pox accounted for 16·4 per cent. of the total deaths. The death rate was again much higher amongst females (37·0 per mille) than amongst males (23·9 per mille). In this connection it is interesting to note that the death rate from pulmonary tuberculosis amongst women is double the corresponding rate amongst men. The Health Officer attributes the excessive female mortality to seclusion in the zenana in which, to secure privacy, ventilation and lighting are so frequently neglected. Plague, cholera and small-pox were all more prevalent than in 1911. The only substantial increase, however, was due to cholera which disease was responsible for 2,244 deaths against 1,860 in 1911. Plague caused 1,831 deaths: the epidemic was at its height in April: there were deaths from plague reported in each month of the year.

The infantile mortality rate was somewhat higher than in 1911 and reached the high figure of 259·6 per thousand births: amongst male children it was 278·9 per mille. High as these figures are they indicate a much better state of affairs than pertained a decade ago: in fact only once during the last twenty years has so low a rate been recorded. Of the infant mortality 36·5 per cent. occurs during the first week of life: premature births, ignorance, and neglect are responsible. The chief reported causes of death during the first week of life are premature birth 371, debility at birth 809, tetanus neonatorum 545. The ignorance and superstition of the native *dhai* is responsible for much. The municipality at present employ only four midwives, one for each 72,000 of the female population!

The birth rate was 21·6 per mille as compared with 21·7 in 1911, the highest rate ever recorded in Calcutta. Estimated on the total female population the birth rate was 67 per mille. Considering only women of the child bearing age, the rate was 126 per mille.

The European seamen arriving in the Port of Calcutta during the year numbered 24,959 compared with 25,065 in 1911, the daily average population being 1,047. There were altogether 14 deaths, *i. e.*, one from "fever" and 13 from "other causes." The average Indian floating population was estimated at 25,843. The number of deaths was 95 against 111, 138 and 193, respectively, during the preceding three years.

47. Fairly normal meteorological conditions; a good monsoon, and average crops characterised the year 1912 in Assam.

Assam.

The provincial birth rate was 32·16 as compared with 31·98 in 1911 which latter figure is practically the average of the preceding quinquennium. The birth rate is higher than that of Madras, equal to that of Burma, but lower than that of all other provinces. The highest district birth rate was returned from Goalpara, 38·77, and the lowest from Nowgong, 27·71. Of towns, Barpeta had the highest birth rate, 55·03, whilst Mangaldai had the lowest, 10·63. The proportion of male to female births was 107. The provincial death rate was 25·04 per mille as against 23·61 in

1911 and 27·06 the mean of the previous five years. Only two other provinces, Madras and the North-West Frontier Province, return a lower rate. The district death rates varied from 38·51 in Darrang to 20·83 in Sibsagar; and the urban rates from 38·10 in Nowgong to 6·84 in Hailakandi. The infantile mortality was 205·6 per mille for males and 187·1 for females. The excess of births over deaths was 7·12 per mille. All districts except Darrang participated in the increase of population.

In Assam, as elsewhere in India, the general accuracy of vital statistics is open to great doubt. In one district where verification was performed with energy, omissions amounting to 13·86 per cent. of the total were detected.

Cholera yielded a mortality of 2·36 per mille as compared with a decennial average of 2·71. The districts of Darrang and Nowgong suffered most; in the latter the Kallang river, which forms the main water supply of the most populous area, is under suspicion as the main factor in the spread of the disease. The mortality from fever in 1912 was slightly less than the average for the preceding decade, 12·94 as compared with 13·31 per mille. The district of Goalpara had the highest mortality rate from fevers, 27·50 per mille. Kala azar was responsible for 1,875 reported deaths as compared with 2,051 in 1911. A kala azar survey is being undertaken by the Deputy Sanitary Commissioner assisted by two assistant surgeons and fourteen sub-assistant surgeons. This has not been completed, but it has been noted that there appears to be a recrudescence of the disease in the Nowgong district and in three sub-divisions on the south bank of the Brahmaputra. The disease also exists in the Sylhet district. The incidence upon children between the ages of 2 and 16 is stated to be marked. The Sanitary Commissioner expresses the opinion from experience in the Golaghat subdivision that, given requisite funds and staff, removal of infected families and persons from infected sites is an effective measure against the disease. The kala azar inquiry that is being carried out under the auspices of the Indian Research Fund Association is at present prosecuting its researches into the etiology of the disease in Assam. There was no case of plague in Assam during the year under report. No other disease calls for comment.

48. In all the districts, except those of the Orissa Division, the rainfall in the latter half of September and October was in defect; this affected the outturn of crops adversely. Food-grains rose in price. In spite of these adverse conditions the year was a comparatively healthy one and there were no epidemics attributed to defective rainfall or failure of crops. In other respects the meteorological conditions approximated the normal.

The birth rate, 42·52, was well in excess of the mean of the previous quinquennium, 39·09, and closely approximated that of 1911, 42·87. The highest birth rate was returned from the Palamau district, 49·64, and the lowest from Singhbhum, 31·60. The birth rate in towns was below the district average, being only 29·22 per mille. The towns of Bhagalpur, 17·26, and Puri, 14·57, have conspicuously low birth rates. The highest birth rate in rural circles was returned for Palkot *viz.*, 84·46 per mille. The provincial death rate fell from 35·12 in 1911 to 31·01 in 1912. The mean of the previous five years was 35·28. Saran had a higher death rate, 39·98, than any other district and Singhbhum had the lowest, 19·98 per mille. The death rates in towns varied between 72·43 in Puri to 4·56 in Daudnagar (Gaya) and in rural circles between 40·24 in Saran and 20·02 in Singhbhum. May was the most unhealthy month and November the healthiest.

Verification of vital statistics shows that registration in compulsory areas is on the whole fair: there is much room for improvement, however, in some places. In rural areas 240,029 events were enquired into and 1,961 omissions (·81) per cent. were detected. In the Purnea district omissions were most frequently detected and averaged 14·54 per cent. In Sambalpur 7,448 occurrences were investigated in 321 villages and no omission was detected.

All the chief causes of mortality, except plague and respiratory diseases, exacted a lower toll on the population in 1912 than the average of the previous decade. The plague death rate was 1·7 as compared with 1·6, the average of the years 1902-11, and respiratory diseases were responsible for a death rate of 0·18 as compared with 0·16. "Fevers" had a death rate of 18·8 (21·18

decennial average). The chief outbreak of cholera occurred in Puri in July and August at the time of the annual Car festival. This outbreak was investigated by Major Greig, I.M.S., and a report of some of his most interesting findings were published in the Indian Journal of Medical Research, Volume I, No. 1, July 1913. The use of potassium permanganate for the disinfection of wells is coming more and more into favour amongst the people of certain districts as a means of combating cholera. There is a remarkable fall in the mortality from small-pox in some places, notably in the Puri district. Between the years 1900 and 1908 the average annual number of small-pox cases reported was 1,891. In the year under report no death from small-pox occurred in Puri town and only nine in the district. Plague as usual was most severe in the western districts, Saran, Shahabad and Patna. These districts are adjacent to the United Provinces district of Ballia in which climatic and other conditions are very similar and in which plague appears now to be endemic. The plague mortality rates in these three districts were Saran, 7.54, Shahabad, 6.31 and Patna, 5.31; these rates are all markedly lower than those of the previous year. The people in villages vacate their dwellings on the occurrence of mortality amongst the rats more readily than in former years. Chota Nagpur and Orissa were as usual practically free from plague. Inoculation is not carried out on any considerable scale anywhere, though the results obtained by the Civil Surgeon of Bhagalpur demonstrated the usefulness of the measure as a preventive measure amongst a population exposed to infection.

49. In the United Provinces 1912 was a prosperous and healthy year. The birth rate was 45.38 per mille as against 43.84 in 1911 and 39.36, the mean of the previous quinquennium. It was highest in the Jhansi district, 55.34, and lowest in Dehra Dun, 26.61. The average birth rate of towns was 41.45.

The death rate fell from 44.95 per mille in 1911 to 29.91 in the year under report. The provincial birth rate thus exceeded the death rate by 15.47; this increase of population was participated in by 46 of the 48 districts. The two districts in which deaths exceeded births were Ballia (by 8.77 per mille) and Naini Tal (1.17 per mille). In the former district plague was responsible, in the latter malaria and cholera. Ballia had a higher death rate than any other district, *viz.*, 47.55 per mille, and Dehra Dun the lowest, 20.87. In towns the death rates varied between 16.82 in Fatehpur and 81.13 in Azamgarh. All causes of mortality had a diminished death roll in 1912 as compared with 1911 with the exception of small-pox. The most marked decreases were fever 340,998, plague 217,356 and cholera 98,795.

The infantile mortality, 206.5 in 1912, was the lowest recorded since 1898 when it was 205.3. This subject is receiving every year increased attention on the part of the local Government. The district rates of infant mortality vary between 278.20 in Hamirpur and 138.32 in Garhwal. In municipalities the infantile mortality averaged 242.16 as compared with 317.28 in 1911. This rate is the lowest recorded in the last thirty years. The rate varied between 321.47 per mille of births in Jhansi, and 84.49 in Bahraich.

Cholera was responsible for a death rate of .40 per mille as against 2.51 in 1911. The submontane districts Kheri, Gonda, Naini Tal and Almora suffered most. Plague was comparatively mild and caused 114,945 deaths as compared with 332,301 in 1911. As usual the eastern districts suffered most; Ballia heads the list with a mortality rate of 25.39 per mille; then comes Azamgarh 11.64 and Ghazipur 9.48. The western districts escaped more lightly. Muzaffarnagar had a death rate of 1.78 per mille as compared with 19.04, the mean ratio of the preceding quinquennium, and Meerut .14 against 8.67. The causes underlying the severity of plague in the eastern districts of these provinces was investigated recently by the Plague Commission: their report has not yet appeared. The greater facility with which infection survives the adverse conditions of the off-season in Ballia and the surrounding districts than it does in the more westerly districts, would appear to be one of the chief contributory causes. As usual the Banda district was completely free from plague.

The deaths from "fevers" were 340,998 fewer than in 1911—the rate per mille being 20.66 in 1912, 27.94 in the preceding year and 31.11 the preceding quinquennial average. The rate for 1912 is the lowest recorded since 1893. That many diseases other than malaria are included under the designation

"fevers" is evidenced by the fact that most deaths from this disease were recorded in the month of May, fewest in August. Some interesting investigations on the subject of malaria were undertaken by the chief malarial officer and his staff. Relapsing fever appeared in the Meerut and Bulandshahr districts. The outbreak was made the subject of a special enquiry and reports are awaited. No other diseases call for comment. An increasing activity in sanitary matters characterised 1912 in the United Provinces as in the other provinces of India.

50. The meteorological conditions of 1912 were characterised by good rain in January, an unusually hot pre-monsoon period and a late and defective monsoon. Food-grains were higher in price than in the two previous years. In spite of these adverse conditions, the year was a comparatively healthy one. The birth rate rose from 43·9 per mille in 1911 to 45·3 in the year under report. The rate for the previous quinquennial period was 41·5. The birth rate in districts varied between 53·1 in Karnal and 20·2 in Simla. The average birth rate of towns was 45·0. Coincident with this rise in the birth rate was a fall in the death rate from 34·1 in 1911 to 26·6 in 1912. This death rate is the lowest recorded since 1886 when it was 26·1. Both these figures compare very favourably with the mean of the previous five years which was 42·7 per mille. The highest death rate for districts was reported for Karnal, 33·8, and the lowest for Dera Ghazi Khan, 19·8. The average death rate in towns was 31·94. The infantile mortality rate was 195·10 for males and 194·57 for females. The marked increase in the birth rates is attributed to the comparative freedom from malaria which the Punjab has enjoyed during the last two years. The increase in population amounted to 18·7 per mille, and in every district the birth rate was higher than the death rate (except Simla where the rates were equal). The excess was most marked in the Lyallpur district where it was 28·4 per mille. Every province had a death rate lower than the mean of the previous 5 years. Verification of vital statistics showed only a small percentage of omissions, registration appears to be steadily improving.

Cholera was responsible for a death rate of ·09 per mille which is just half the average rate of the previous 5 years. Small-pox was responsible for 30,339 deaths, the largest annual number since 1896. The mortality was greatest amongst infants. In some districts it is probable that inoculators were responsible, in part, for the spread of the disease. Plague was much less prevalent and much less severe than in the previous year. Only 35,123 deaths were reported as against 198,669 in 1911. The deaths in British districts amounted to 29,850, the balance occurring in Native States. The four most severely infected districts were Ludhiana, Karnal, Gujrat and Ambala where the plague death rates were 6·12, 4·64, 4·55, and 3·44 per mille, respectively. All the other twenty-four districts had ratios of less than 3 per mille. The mean plague death ratios per mille of these four districts for the previous quinquennium were 17·16, 9·51, 16·24 and 13·00. The rate for the whole province was 1·54, as against a preceding quinquennial average of 10·11. These figures show how comparatively mild were the plague epidemics of 1912.

Malaria.—Almost as satisfactory as the decreased prevalence of plague was the lowered death rate from "fevers". In 1912 "fevers" yielded a death rate of 14·22 per mille as compared with 15·33 in 1911 and 21·66 the preceding quinquennial average. In no year since 1877 have "fevers" been responsible for so low a death rate as in the year under report. The highest fever mortality was recorded in December, the lowest in February. The urban fever death rate fell from 16·00 to 11·95 per mille. The prevalence of no other disease calls for special comment.

51. Rainfall in 1912 was in slight defect: its seasonal distribution was, however, good. The price of food stuffs rose throughout the province.

The birth rate rose from 35·1 per mille in 1911 to 37·1 in the year under report. This rate is still low for India. The highest district rate reported was for Hazara, 42·5 per mille; the lowest for Peshawar, 31·5 per mille. That the registration of births is very defective is possibly indicated by the fact that the excess of male over female births recorded is extraordinarily high, *viz.*, 123 male for every 100 female births. In the Peshawar district there were 134·9 male births recorded for every 100 female births.

The provincial death rate was only 23·4 per mille as against 23·3 in 1911 and 27·9, the mean of the previous five years. The death rate varied in districts from 27·2 in Hazara to 20·3 in Bannu. Nearly fifty per cent. of the total deaths were those of children under five years of age. The infantile mortality rate, 167, high as it is, is thought to fall far short of a true expression of fact.

There was no indigenous plague in the province during 1912 and only two imported cases were reported. There were outbreaks of cholera in the Hazara and the Peshawar districts, the former being responsible for 630 deaths, a rate of 1·24 per mille, the latter 625 deaths, 0·76 per mille.

52. A late, but for the most part well distributed, monsoon helped to bring about a fair outturn of *kharif* crops. A seasonal fall of rain in November made the prospects for the *rabi* crop good. Four districts (Nimar, Amraoti, Akola and Buldana) suffered considerably from defective rainfall. In spite of the generally satisfactory climatic conditions 1912 was an unhealthy year.

The birth rate fell from 49·47 per mille in 1911 to 48·24 in 1912. This rate is stated to be the lowest recorded during the past nine years; it is, however, still higher than the birth rate recorded for any other province of India. The highest district birth rate was for Merwara, 55·08 per mille, the lowest for Chhindwara, 45·0 per mille. For every 100 female births 104·56 male births were recorded. The average birth rate of towns was 40·87. The excess of births over deaths fell from 14·80 per mille in 1911 to 5·90 per mille in the year under report.

The death rate which was 34·67 in 1911 (34·04 the mean of the previous quinquennium) rose in 1912 to 42·34 per mille. This rate is higher than that of any other province in India. The district death rates varied from 27·29 per mille in Mandla to 66·46 in Nimar. Mortality in towns was represented by a death rate of 47·60 per mille as compared with a rural rate of 41·84. September and October were the most unhealthy months of the year and July the healthiest.

Infantile mortality is represented by the appallingly high figure 293·60 per thousand births to which it rose from 245·75 in 1911. The rise is attributable to the greater prevalence and severity of epidemic disease.

The very considerable increase in the death rates of all the chief causes of mortality during 1912 is well shown in the following table reproduced from the annual report of the Sanitary Commissioner of the Central Provinces.

Chief causes of mortality.	Death rate.			Increase or decrease.	
	1912.	1911.	Mean of previous five years.	Compared with 1911.	Compared with mean of previous five years.
1	2	3	4	5	6
Cholera	2·46	·22	·42	+ 2·24	+ 2·04
Small-pox	·33	·12	·31	+ ·21	+ ·02
Plague	1·38	2·01	1·73	—·63	—·35
Fevers	19·41	16·85	15·85	+ 2·56	+ 3·56
Dysentery and diarrhoea	4·23	3·15	3·13	+ 1·08	+ 1·10
Respiratory diseases	3·21	2·61	2·46	+ ·60	+ ·75
Injuries	·47	·45	·48	+ ·02	—·01
All other causes	10·85	9·26	9·66	+ 1·59	+ 1·19
Total	42·34	34·67	34·04	+ 7·67	+ 8·30

Plague is the only disease that did not exhibit an enhanced prevalence and mortality as compared with 1911. Cholera was extremely prevalent; every district was affected and 34,313 deaths were attributed to this disease. The epidemic reached its height in September; it had all but died out by the end of the year. Returning pilgrims from Pandharpur and Puri played an important part in introducing infection in several instances. It seems to be doubtful, however, whether the outbreak was entirely true cholera: water seems to have played an important part in the spread of infection, but a large part is attributed to flies. To small-pox 4,556 deaths were attributed as against 1,714 in the preceding year. Of the former number 1,491 were reported among infants under one year of age. To fevers 270,162 deaths were ascribed. This gives a ratio of 19·41 per mille of population, an increase of 2·56 per mille over the preceding year. The plague death rate was 1·38 per mille as compared with 1·73, the mean rate of the previous quinquennium. Jubbulpore, Nagpur and Narsinghpur were the three districts that suffered most and in them the death rates were 9·17, 5·92 and 4·76 per mille, respectively. All other districts had ratios of less than 3 per mille. During the year 38,719 inoculations were performed.

53. In Madras 1912 was a favourable year as regards rainfall. Both the south-west and the north-east monsoons yielded more rain than in 1911. On the whole the rain was well distributed. Tanjore was the only district that fared badly in both monsoons and the year's fall was 8·57 inches in defect. In spite of favourable climatic conditions the prices of food-grains were progressively higher than in the previous year and very much above the average of the previous fifteen years. Rice, ragi, cholam, and cumbu, the chief staple grains of the Presidency, all sold at prices approximately 25 per cent. above the average.

The birth rate rose from 30·4 per mile 1911 to 30·9; this rate is still below the average of the preceding quinquennium, 32·1. It varied in districts from 18·2 in Ganjam to 39·0 in Madras. The average birth rate in towns was 31·5 per mille and ranged between 2·5 in Gudivada (Kistna district) to 87·1 in Coimbatore. In rural areas the birth rate was lower than in towns and averaged 30·8 per mille. There were 104·8 male births for every 100 female births. Excepting Coorg, Madras had as usual a lower birth rate than any other province of India.

The provincial death rate rose from 23·1 per mille in 1911 to 24·3 in the year under report. The mean death rate of the previous quinquennium was 24·0. Only one other province, the North-West Frontier Province, returned a lower death rate than this. The rates in districts varied between 16·4 per mille in Ramnad and 39·2 per mille in Madras. Towns had a higher average death rate, 28·6, than had rural areas, 23·8. Infantile mortality was represented by a rate of 190·4 per mille of births, seven per mille in excess of the rate for 1911. In municipalities the infantile death rate was as high as 248·2 per mille of registered births.

Cholera was more prevalent than in 1911 and caused the death of 2·3 per mille of the population. All districts reported deaths from this cause. Cholera was most severe in the Bellary district where it was responsible for a death rate of 8·3 per mille. It is interesting to note that those towns that have a piped water-supply show a continuously decreasing mortality from cholera, which decrease dates from the installation of such a supply. Small-pox was less prevalent than in the previous year and caused a death rate of 0·4 per mille. Plague contributed 6,651 deaths against 15,185 in 1911. As usual Bellary was the most heavily infected district.

54. The birth rate in Madras city was 38·8 per mille as compared with 38·3 in 1911 and 37·7 the average of the preceding quinquennium. Of the total births 16·8 per cent. took place in the public hospitals. The death rate exactly equalled the birth rate, 38·8 per mille against 42·0 in 1911 and 40·2, the mean of the previous five years.

The male and female death rates are much more nearly equal than in Bombay and Calcutta, being 38·1 and 39·5 per mille, respectively. Infantile mortality fell from 305·4 per thousand births in 1911 to 280·0 in the year under report. Malaria

was responsible for a death rate of 5·7, tubercle 1·3 and cholera 0·7 per mille. Thirty-six deaths from kala azar were reported against 47 in the previous year. A malaria survey of the city is about to be undertaken. There was no indigenous plague and only one imported case. The plague passport system is still in vogue. During the year 142,071 rats were destroyed.

55. The birth rate in Coorg was 26·32 per mille to which it fell from 27·25 in 1911. The mean rate for the previous five years was 26·35. As usual the birth rate of Coorg is lower than that of any other province of British India, and this year is little more than half the rate registered for the Central Provinces. The rate in the different taluks varied between 19·35 and 37·52 per mille.

The death rate, 38·37, was nearly 6 per mille higher than in the previous year and 4 per mille above the preceding quinquennial average. The very considerable decrease in the population that these figures indicate is stated to be chiefly due to the mortality amongst the immigrant coolies in the hospitals at Mercara and Virajendrapet. The latter town returned a mortality rate of 91·86 per mille. The death rate in towns, 64·12, was considerably higher than in rural circles. June, July and August were much the most unhealthy months of the year. Of the 6,713 total deaths recorded 5,697 were ascribed to fevers, 1,142 more than in 1911.

There was no cholera, and plague caused only nine deaths against 57 in the previous year.

56. Meteorological conditions varied but little from the normal. The monsoon was late in becoming established, but the rain it brought was nearly normal in amount though somewhat irregularly distributed. The prices of food grains rose above normal in most districts and in the Panch Mahals district famine was declared. The year was a decidedly unhealthy one.

The birth rate fell from 36·00 per mille in 1911 to 34·97. The mean of the previous quinquennium was 35·53. In districts it varied from 16·54 in Hyderabad to 49·03 in West Khandesh. Rural circles had a higher rate, 36·10, than had towns, 27·97. Of towns Sholapur returned the highest rate 64·73.

The death rate rose from 28·35 in 1911 to 34·88 in the year under report: the mean of the previous five years was 29·20. All districts but one had higher death rates than in the previous year, these rates varying from 12·64 in the Upper Sind Frontier district to 49·79 per mille in Ahmedabad. The death rate in towns averaged 41·48 per mille, in rural circles 33·80. Of towns, Gogha and Dholka, both in the Ahmedabad district, headed the list with death rates of 76·74 and 73·10 per mille, respectively. More deaths occurred in August than in any other month, fewest in December. All the reported causes of death except plague and injuries were responsible for higher death rates than in the previous year. Infant mortality rose from 165·83 per mille in 1911 to 218·70 in the year under review.

Cholera.—Broach was the only district that escaped infection. The cholera death rate for the whole presidency was 3·29 per mille as compared with 0·51 per mille, the mean of the previous five years. Ahmednagar, Poona, East Khandesh and West Khandesh were the most infected districts and had cholera death rates of 8·83, 7·13, 6·96 and 6·23 per mille, respectively. In all 64,505 deaths were attributed to cholera, a figure that has only once been exceeded during the last twenty years, *viz.* in 1900, a famine year, in which cholera caused 163,889 deaths. The epidemic reached its height in July. The people were generally quite ready to have their sources of water-supply treated with potassium permanganate. Small-pox was responsible for 6,631 deaths, a bigger number than in any year since 1905. To fevers were attributed 286,321 deaths as against 223,027 in 1911 and 250,077 the mean of the years 1907-12. This large figure represents a death rate of 14·62 per mille. Ahmedabad (33·78) had the highest district fever death rate and Belgaum (5·32), the lowest. That many other diseases than malaria are included under the heading "fevers" is once more shown by the lack of any very definite seasonal prevalence of this cause of mortality. Fewest deaths, 19,073, were recorded in February, most, 28,166, in August, but in

no other month than February were the deaths less than 21,000, and the monthly figures fluctuated more or less regularly between the extremes. Plague was comparatively mild: it was responsible for 28,984 deaths as compared with 100,399 in 1911. The death rate 1·48 was just half the mean of the previous quinquennium. Bijapur was by far the worse infected district where plague was responsible for a mortality rate of 12·88. Belgaum came second with a death rate of 3·54.

57. The climatic conditions in the city of Bombay during 1912 were not favourable, the rainfall being in marked defect: this fact accounts in part for the unhealthiness of the year. The death rate, 39·77 per mille, was the highest recorded since 1907: the figure compares very unfavorably with the rate for 1911 (35·69) which was about equal to the rate for 1909 (35·66), the latter being the lowest recorded in the city of Bombay since the advent of plague in 1896. All registerable causes of death, except plague and measles, had a higher mortality rate in 1912 than in the previous year. The total death rate was, however, well below the preceding decennial average. Small-pox, cholera and plague were all epidemic in the city during the year under review. Small-pox accounted for 979 deaths, more than half the number occurring among children under five years of age. Cholera was responsible for 1,790 deaths compared with 123 only in 1911; the former figure is the highest that has been registered in Bombay since 1901. Plague caused 1,717 deaths and was thus the mildest epidemic in the experience of the city. This fact is the most pleasurable feature of the health conditions of Bombay in 1912. There were 3,993 more deaths than in 1911: of this large increase 53·3 per cent. were among children under five years of age.

The birth rate rose from 21·82 per mille in 1911 to 21·96 in the year under report, the highest rate since 1906. Registration of birth appears to be progressively improving, though the Health Officer remarks that the assistance received from the general population is still very meagre: the reasons for registration are beyond their comprehension.

Of the 23,186 births registered, 62·1 per cent. were visited by nurses or midwives of the Municipal Health Department, and 13·9 per cent. of the births were attended by qualified midwives.

As usual the female death rate, 51·96 per mille of sex population, is much greater than the male rate 33·31. The infant mortality rate was 448·2 per thousand of births as compared with 379·8. The unfavourable climatic conditions to which reference has been made, were specially prejudicial to infants: increases were registered under almost every cause of death. Amongst the Lingayats and the Jains the number of deaths of infants under one year of age exceeded the number of births registered during the year.

Vigorous anti-malaria measures continue to be taken in the city and a stegomyia survey is also being carried out.

58. The total rainfall of 1912 approximated very closely to the normal, being 4 per cent. in excess in Upper Burma and 2 per cent. in defect in Lower Burma. The distribution was, however, somewhat irregular. The price of food grains were on the whole much higher than in 1911. Rice was abnormally dear in Upper Burma where an average of only 7 seers 7 chattaks were obtainable for the rupee as compared with 10 seers 7 chattaks in 1911. There was, however, no widespread sickness or mortality directly traceable to scarcity of food. The provincial birth rate fell from 32·64 per mille in 1911 to 32·13 in 1912. There was a slight increase in the birth rate of Lower Burma (31·68 as against 31·44) but a greater proportional decrease in Upper Burma (32·96 against 34·85). The district birth rates varied between 43·57 per mille in Tavoy and 18·25 in Rangoon, both districts of Lower Burma. There was but slight difference between the birth rates for towns and rural circles in Upper Burma, but in Lower Burma the rate for towns was only 22·95 as compared with 32·93 in rural circles. This disparity is probably chiefly accounted for by the disproportion of the sexes in towns, the large towns of Lower Burma being thronged with male coolies whose families are elsewhere. In certain other towns, notably in Kyaukpau

where the birth rate was only 11·74 per mille, the low figure is not capable of being explained by the disproportion of the sexes, and is ascribed by the local authorities to faulty registration.

The death rates of both Upper and Lower Burma were higher than in 1911. In the former it rose from 27·07 to 28·95 and in the latter from 23·99 to 26·00. The district death rates varied from 47·18 in Kyaukse to 19·88 in Kyaukpyu. The average death rates of towns, 44·05 in Upper Burma and 37·23 in Lower Burma, were considerably higher than the rates of rural areas, 27·54 and 24·38, respectively. The coastal districts fronting on the Bay of Bengal with one exception had considerably lower death rates than had the inland districts; this was due to the comparative freedom of the former in 1912 from plague, cholera and small-pox.

The infant mortality rate for the whole province was 228·15 per thousand births, Lower Burma 218·24, Upper Burma 245·66. No satisfactory explanation has been adduced for the considerably higher rate returned by Upper Burma. The highest infant mortality rates for towns were reported for Taungdwingyi, 634·41 per mille, and Nyaunglebin 598·42 per mille. The Society for the Prevention of Infantile Mortality did good work during the year in Mandalay. Proposals are on foot to start similar societies in Thatôn and Rangoon. Registration of vital statistics is in a backward way in Burma. The provincial Sanitary Commissioner estimates that the recorded birth rate is 25 to 33 per cent. below the true figure.

Cholera was responsible for death rates of ·94 in Lower Burma and ·34 in Upper Burma, (means for the previous quinquennium ·90 and ·79, respectively). During an investigation of a small outbreak in the Rangoon Lunatic Asylum, cholera vibrios were found in house flies caught in the asylum. Small-pox was responsible for 6,117 deaths in Lower Burma, 1,842 in Upper Burma. There was a high death rate from malarial fevers in the Minbu district where the excess of "fever" deaths over those in 1911 was 2,659. The provincial Sanitary Commissioner is of opinion that the spread of malaria infection in this district of a virulent type has been directly associated with the extension of irrigation. Travelling dispensaries are to be supplied to this district to cope with future epidemics. Plague was responsible for 3,014 deaths in 1912, less than half the number reported in the previous year.

59. The birth rate was 18·25 per mille against 18·31 in 1911. This is the lowest rate recorded during the past five years. The death rate was 35·28 as against 38·32 in the previous year. The infantile mortality rate was 331·28 per thousand of births. Plague was responsible for 866 cases and 817 deaths, the second lowest figure recorded since 1905. No month was free from plague: more deaths from this disease, 151, were reported in August than in any other month. During the year 465,408 rats were destroyed. Tubercle of the lungs was the cause of a mortality rate of 1·61 per mille. The incidence of this disease on males and females is approximately equal.

60. The birth rate was 47·08 per mille, nearly 7 per mille above the mean rate of the previous five years. Excluding the Central Provinces, this rate is higher than that returned for any other province of British India. The death rate was 38·25 per mille, a satisfactory decline from 44·41 which was the rate in 1911. All diseases except small-pox and respiratory diseases were less prevalent than in 1911. Plague was virtually absent, only thirteen deaths from this cause having been registered. The death rate from "fevers" was 27·77 per mille compared with 34·95 in 1911. This fever death rate is, after Coorg, the highest provincial rate returned, and is probably evidence of defective diagnosis of the cause of death, though the seasonal variation in the death rate indicates the probability that malaria played a large part in its causation.

61. Between the 4th January and the 2nd November 1912, 16,024 pilgrims left Bombay for Jeddah in twenty-three vessels. This number is considerably below that of the previous year, 22,852. Before embarkation at Bombay, 10,587 outgoing pilgrims were voluntarily vaccinated and it is estimated that probably three-quarters of the total number were thus protected against small-pox. All pilgrims were subjected to a careful

medical inspection before leaving Bombay. The ships were cleansed and freed from rats. A fully equipped plague observation station was established at Perim. All pilgrims were landed at Camaran to undergo observation for five days (if there was no infectious disease on board) before being allowed to proceed to Jeddah. No infectious disease was reported on ships taking pilgrims from India; there was, however, an outbreak of cholera amongst Indian pilgrims at Camaran. There were 69 deaths from all causes on board outgoing pilgrim ships between Bombay and Jeddah.

Of the Haj of the previous year, 11,670 pilgrims and 2,754 of that of 1912, returned to Bombay from Jeddah in 22 vessels in the year under report: 247 deaths occurred amongst returning pilgrims.

Nine returning pilgrim ships had one death from plague, fifty-six cases of small-pox and six cases of chicken-pox amongst them.

SECTION IV.

JAILS OF INDIA.

62. The year 1912 was one of prosperity over the greater part of India. Though the crops, on the whole, did not come up to the very high standard of those of the previous year, their outturn nevertheless exceeded the average of the preceding five years.

The year opened well with normal and timely winter rains, and prospects were good except in Kathiawar and in some parts of Bombay and Central India where famine, due to insufficient rain in 1911, had already been declared. Later, distress, almost amounting to famine, was evidenced in Baroda and Rajputana. Elsewhere the outlook was hopeful.

The monsoon of 1912 was late in beginning and unusually short; over the greater part of India, the rainfall it brought was, however, only very little below normal: it was, moreover, particularly well distributed. In November, a rain-bearing depression traversed those parts of the country where rain was most needed.

From an agricultural point of view the year was satisfactory. The wheat crop yielded an outturn which, though 2·3 per cent. below the record one of 1911, exceeded the average of the preceding five years by one and a half million tons or 19·2 per cent. The rice crop was good though its yield showed a 13·5 per cent. decrease on that of 1911. This decrease was chiefly brought about by deficient rainfall in September and October in Bihar and Orissa. Sugarcane gave a record yield, 20 per cent. above the preceding quinquennial average. Oilseeds likewise did well. The year closed with excellent prospects for the chief spring crops of 1913.

These few preliminary remarks on climate and crops are prompted by the correlation that exists between the prosperity of India and the population of its jails. This is a matter that has been dealt with fully in the reports of former years and there is no need to labour the point further here, except to emphasize the following fact which has a direct bearing on this question. At least nine-tenths of the population of India is an agricultural one, directly dependent on rainfall and other climatic conditions to a much larger extent than in European countries. The struggle between man and his environment is far more strenuous in India, where climatic and other conditions are peculiarly capricious, than in most western civilised countries. The Indian is, in other words, much more at the mercy of his environment.

63. In India, the mean daily population of jails fell from 97,215 in 1911 to 92,626 in the year under review, a decrease of 4,589. This is 3,046 below the average prison population for the preceding ten years. The decrease, as compared with 1911, is participated in by all administrations except Burma, the Punjab, the North-West Frontier Province and Bombay.

The prison population of the Andamans fell by 604 (11,884 in 1911 to 11,280 in 1912).

It is not justifiable to assume that these figures denote an all-round decrease in crime in 1912 as compared with the preceding year. This was unfortunately not the case. The release of convicts and civil prisoners, on the occasion of the Imperial Durbar at Delhi in December 1911, explains the fact that 1912 opened with a prison population considerably below normal. This was indeed the chief factor in bringing about the decreased average strength of prisoners in 1912.

64. Sickness and mortality rates show an encouraging improvement in health in the jails of nearly all parts of India. The hospital admission rate (for all causes) fell from 537·7 in 1911 to 535·6 per mille, and the death rate from 18·44 in 1911 to 16·74 in the year under review. This rate of mortality is the lowest ever recorded for Indian jails.

The constantly sick rate per mille also fell from 26 in 1911 to 25 (28 for the decennium 1902-11).

The chief causes of sickness were—

Disease.						Admission rate.
Malaria	...	...	...	...	...	105·2 per mille.
Abscess, ulcer and boil	...	...	...	...	...	61·3 „
Dysentery	...	...	...	...	...	55·4 „
Diarrhœa	...	...	...	...	...	41·2 „
Respiratory Diseases	...	...	...	...	...	24·0 „

and the principal causes of death were—

Tubercle of the lungs	...	...	...	...	...	3·18 „
Dysentery	...	...	...	...	...	2·59 „
Pneumonia	...	...	...	...	...	1·72 „

These figures show a marked improvement on those of 1911.

If we except respiratory diseases (death rate ·79 against ·76), diarrhœa (·79 against ·78), cholera (·77 against ·10) and small-pox (·13 against ·03), differences that are trifling, the death rate from all the causes of mortality in Indian jails exhibited a satisfactory decline when compared with the figures for 1911.

65. The improvement under this head is extremely satisfactory. The following table is of interest :—

Malaria.

ADMISSION RATES FROM MALARIA PER THOUSAND OF AVERAGE DAILY STRENGTH.

Province.	1894-1898.	1899-1903.	1904-1908.	1909.	1910.	1911.	1912.
Burma	159·5	131·6	45·2	35·5	45·4	44·0	30·4
Assam	450·8	305·3	328·2	573·9	229·6	197·6	152·5
Bengal	292·2	263·5	273·3	230·3	267·3	251·9	252·1
Bihar and Orissa	359·1	395·9	311·2	262·3	209·4	214·3	179·3
United Provinces	296·3	260·7	226·3	212·1	123·2	94·0	74·2
Punjab	680·5	560·5	255·4	139·3	116·0	98·2	137·3
North-West Frontier Province	819·3	437·1	532·1	504·4	353·1	197·6	337·9
Bombay	311·7	241·7	150·2	123·8	96·3	86·8	67·0
Central Provinces	273·9	329·5	193·5	151·3	104·8	65·7	49·5
Madras	150·4	100·3	73·2	81·0	94·2	64·2	49·1
India, excluding the Andamans	298·5	238·4	199·5	172·4	134·7	113·8	105·2

The downward trend is manifest in all except the Punjab, the North-West Frontier Province and Assam. The Punjab in spite of increased prevalence shows a considerably lower death rate, ·17 as compared with ·76 in 1911. The North-West Frontier Province has a mortality of ·62; there was no death from malaria the year before.

The death rate for all the jails of India on account of malaria amounted to ·52 per mille (·96 in 1911). This figure, the lowest that has as yet been recorded, is less than half the average malaria death rate of the previous decade (1902-11).

The steady decline still maintained is perhaps the most notable of many satisfactory facts brought to light by a study of the jail reports for 1912 and reflects very great credit on the Department responsible.

66. Improvement, though not so marked here as in the case of malaria, has nevertheless been attained. For India as a whole the admission and death rates were :—

Dysentery.						
Admissions	...	...	...	57·7	56·6	55·4
			1910	—	1911	—
Deaths	...	...	...	3·46	2·91	2·59

Bombay, Punjab, the North-West Frontier Province and Burma show slightly increased death rates over those of the preceding year. Other administrations all show a decrease. Assam and Bengal show the highest admission rates but the death rates are lower than in 1911. The Central Provinces death rate dropped from 11·47 to 3·83 (average of preceding ten years, 5·32)—a very marked improvement.

67. Though the rate of admissions into hospital on account of tubercle of the lungs
 Tubercle of the lungs. fell from 10·5 in 1911 to 9·6 in 1912, and the death rate from 3·65 to 3·18, the admission rate is still slightly above the average admission rate for the last ten years (9·0). The jails of the Punjab still show the highest admission and mortality rates under this head though they have fallen from 24·9 and 7·22 per mille in 1911 to 17·5 and 5·16, respectively, in 1912. These figures are still above the average of the preceding decade, 12·2 and 4·83.

A very decided improvement in the Central Provinces is evidenced by the fall of the admission and death rates from 13·4 and 6·15, respectively, in 1911, to 8·0 and 3·51 in the year under review.

68. There were 130 admissions and 71 deaths from cholera as against 19 and 10
 Cholera. in 1911 and 42 and 23 in 1910. Of the deaths 30 occurred in Burma, 17 in Bombay, 12 in Madras and 8 in Bihar and Orissa.

69. There were 81 admissions and 11 deaths from enteric fever compared with 86 cases and 21 deaths in the previous year.
 Enteric Fever.

The following facts and figures are culled, for the most part, from the annual reports of the Inspectors-General of jails of the various administrations.

70. The daily average strength of prisoners was 1,231 less than in 1911. This
 Bengal. state of affairs was chiefly due to the liberation of convicts and civil prisoners in December 1911 to which reference has been made above. There was no overcrowding.

It must be noted that the figures here given for Bengal jails are not comparable with those of last year's report. The revocation of the partition of Bengal, that had been effected in 1905, and the constitution of the new province of Bihar and Orissa, both of which took effect from 1st April 1912, added some jails to, and took others away from, the Bengal administration. The Bengal figures in this report are for the jails of Bengal, as at present constituted, for all twelve months of the year.

The death rate from all causes was lower, though the admission rate was higher, in 1912 than in the preceding year, 21·84 and 973·3, as compared with 30·76 and 910·4 in 1911. The decennial averages were 966·3 and 25·03, respectively.

Dysentery was responsible for more deaths than any other disease and had a death rate of 4·05 per mille against 5·65 in 1911. It was worst in the eastern districts. The death rate from malaria was a trifle higher than in the preceding year (1·69 and 1·43 per mille, respectively). There were 41 deaths ascribed to tuberculosis. Pneumonia, which in jails is a disease largely attributable to overcrowding, had a lower case incidence and a lower mortality than in 1911. There were only 4 cases of cholera in all the jails.

The most unhealthy jails are those of Jalpaiguri, Rangpur, Faridpur, Barisal and Krishnagar.

Jalpaiguri has a death rate—5 years' average—of 38 per mille: malaria and dysentery are rife in the district.

Rangpur has an average quinquennial death rate of 59. This district is one of the most unhealthy in Eastern Bengal.

Faridpur has an average quinquennial death rate of 43 per mille. Here, as in Rangpur, a majority of prisoners were received in bad or indifferent health.

Barisal owes its unenviable reputation to the prevalence of dysentery. There were 16 deaths from bowel complaints in 1912. A new pipe water supply is shortly being installed.

As illustrative of the vastly better conditions under which prisoners live compared with the general population, it is interesting to record that the death rate in subsidiary jails, where prisoners are only kept for a few days after conviction, was as high as 39·3 in 1912 as compared with 21·84 for district and central jails.

All the central jails were remarkably healthy. They had death rates as follows : Rampore Boalia 13·19, New Central 14·97, Dacca 15·79, Midnapore 20·75, Alipore 16·87, Presidency (Indian) 20·00, Presidency (European) no death.

71. The average number of prisoners in the jails of Assam was 166 less than in 1911. The same causes were operative as in Bengal in bringing this about, as well as the fact that the transference of prisoners from Eastern Bengal ceased with the re-adjustment of provincial boundaries.

There were 1,057 more admissions into jail than in the previous year.

There was a marked improvement in the health of the prisoners as compared with 1911.

The admission and death rates which in 1911 had risen to 1,011·3 and 58·89, respectively, fell to 900·6 and 37·50 (preceding decennial average, 892·6 and 37·37). In spite of this the jails of Assam have a very much higher mortality rate than have those of any other province in India.

There was less overcrowding than in 1911.

The total deaths numbered 60, of which 27 occurred in the Sylhet jail. This jail heads the list in this unenviable respect and its deaths were due to dysentery (10), pneumonia (3), malaria (2), tuberculosis (2), leprosy (2), cholera (1) and other causes (7).

As a cause of death dysentery was easily first. There was an increase in the admission rate from 233·3 to 291·9, but the death rate from this disease fell from 16·42 in 1911 to 15·62 in the year under report. Even so this figure is more than thrice as high as the corresponding figure for the jails of any other administration. The average decennial (1902-1911) death rate for dysentery for the Assam jails is 10·92 per mille per annum.

Both pneumonia and tubercle of the lungs were considerably less prevalent and less fatal than in the previous year: the mortality rates from both these diseases were below the average of the years 1902-1911.

A satisfactory decline in the death rate from malaria from 5·10 in 1911 to 1·25 in 1912 is noteworthy. From July to November a prophylactic issue of 10 grains of quinine twice weekly was enforced, with satisfactory results.

In spite of the improved health of the Assam jails that this year's report evidences, much remains to be done before their health statistics are made comparable to those of the jails of the other provinces of India.

72. This province only dates from April 1st, 1912. This report, however, deals with its jails from the commencement of the year. The average daily strength of prisoners was 735 less than in 1911, though there was a slight increase in the number of imprisonments.

There was an increase in the admission rate for all causes of 41·7 per mille, but the mortality rate fell from 19·28 in 1911 to 17·88 per mille in 1912.

Phthisis was responsible for more deaths than any other disease and its death rate 3·96, as against the previous year's figure of 1·98, was higher than the decennial average 3·30. Bhagalpur central jail was chiefly responsible for the large increase. Here there were 30 cases with 13 deaths. Defective ventilation of the factory buildings is said to be, possibly, in part, responsible. Steps have been taken to remedy this.

Dysentery which comes next in importance as a cause of mortality was responsible for a death rate of 2·69 per mille, exactly the same as in 1911.

There were 20 cases of cholera among prisoners with 8 deaths. Fourteen of these cases occurred in Puri jail. This outbreak is of interest as Major E. D. W.

Greig, I.M.S., who is in charge of the cholera investigation that is being conducted by the Indian Research Fund Association, was able to demonstrate that the small epidemic owed its origin to a convalescent carrier. He, moreover, adduced evidence to show that flies were instrumental in the spread of infection. Major Greig's report on this outbreak is published in the Indian Journal of Medical Research for July 1913.

From the point of view of malaria, 1912 was healthier than its predecessor. There were only 2 deaths from this disease and the admission rate fell from 214·3 in 1911 to 179·3 in 1912. A prophylactic issue of quinine was almost universally employed and apparently with satisfactory results.

On the whole the health of the prisoners was decidedly better than in 1911: this is ascribed in large measure to the absence of overcrowding.

73. The fall of 1,605, in the average strength of the jails of these provinces was partly due to the liberation of convicts in December 1911, but a series of good harvests is believed to have been a factor of much importance. There was a considerable decrease in the number admitted into jail. The daily average number of prisoners in 1912 in the jails of the United Provinces is the lowest yet recorded.

There is an all-round very marked improvement in health. The number of prisoners constantly sick fell to 23 per mille from 24 in 1911 and 29, the average number of the last decade. Admissions into hospital were 425·7 per mille as compared with 442·6 in the previous year. The death rate was only 10·48 as against 14·62 in 1911 and 17·96, the average of the ten years 1902-1911. This death rate is very considerably lower than that recorded for the jails of any other province and is a record for these provinces. All diseases alike show a markedly diminished mortality rate. The death rate of the central jails was only 9 per thousand. These figures speak very highly for the jail administration of the United Provinces.

There was no case of cholera in any of the jails. There were 42 deaths from dysentery as against 51 in 1911. The Inspector-General of Prisons expresses the opinion that the decreased dysentery mortality is chiefly due to better cooking of the jail diet. Many jail superintendents hold that the prophylactic issue of quinine is also instrumental in checking dysentery.

There were 9 deaths from malaria, a rate less than half that of the preceding year. The admission rate for this disease was only 74·2 per mille. It must be noted that there was in 1912 but little malaria among the free population. Quinine was issued as a prophylactic as in former years.

Tubercle of the lungs was responsible for 45 deaths, a rate of 2·02 per mille as against 2·80 in 1911. The Inspector-General expresses the opinion that, taking into consideration improved methods of diagnosis, there is less tubercle in the jails of the United Provinces than there was 10 or 20 years ago.

74. On 1st October the Delhi jail was transferred from the Punjab administration to the Government of India. It is included, however, in this report, for the last time, amongst the jails of the Punjab.

The daily average strength of convicts shows a slight increase over that of 1911, 12,010 as against 11,910, and this in spite of the liberation of the convicts in December 1911, on the occasion of the Imperial Delhi Durbar. Imprisonments showed an increase of 2,062 over the number for the preceding year. In one district, Shahpur, the rise in crime was 100 per cent.

Serious overcrowding occurred in 14 jails.

The year was a healthy one. The ratio per mille of strength constantly sick fell from 33 in 1911 to 29, which is the average of the preceding 10 years. The admission and mortality rates, from all causes, both showed satisfactory declines, from 631 and 27·04, respectively, in 1911 to 604·5 and 19·15 per mille in the year under report.

The admissions to hospital from malaria show an increase from 98·2 to 137·3, but this figure is little more than half the average of the previous decade. The malaria

mortality rate was only $\cdot 17$ per mille as compared with $\cdot 76$ in 1911 and $\cdot 60$ the average of 10 years. There was but little malaria amongst the free population of the Punjab in 1912.

There was only one case of cholera in the Punjab jails during the year.

Dysentery showed a slightly increased mortality, $2\cdot 58$ per mille against $2\cdot 02$ in 1911.

Tubercle of the lungs, once more, is the principal cause of the Punjab jail mortality and was responsible for an admission rate of $17\cdot 5$ and a death rate of $5\cdot 16$ per mille. These figures, big as they are, are a decided improvement over the corresponding ones for 1911, $24\cdot 9$ and $7\cdot 22$, respectively. Tubercle is still more prevalent in the jails of the Punjab than in those of any other administration.

Major W. H. C. Forster, I.M.S., has submitted a report on the "Etiology of Tubercle in the Punjab jails". He believes that a certain proportion of cases are infected in the jails and that certain conditions connected with overcrowding, ventilation, diet, general sanitation, disinfection and the use of cubicles are responsible for this. These matters are receiving the careful consideration of the local Government who have already sanctioned the construction of a special jail for tuberculous patients. Pneumonia has lower admission and death rates than in 1911 and than those of the average of the years 1902-11.

There was no case of plague and only 5 deaths from small-pox.

75. The vital statistics of the jails of this province are evidence of the healthy state of its occupants. The mortality rate, $11\cdot 71$, though a fraction higher than that of 1911, is still remarkably low and very much less than the preceding decennial average. This rate is lower than that returned for the jails of any other administration with the exception of the United Provinces and Madras.

North-West Frontier Province.

There were only 11 deaths among convicts. The mortality during the years 1911 and 1912 was only half that of the two previous years and one-third less than the lowest previously recorded.

The average strength of the jails shows an increase of 28 as compared with 1911.

76. A markedly diminished death rate and a drop in the ratio of prisoners constantly sick from 22 in 1911 to 14, evidence the healthiness of the year under report in the jails of the Central Provinces. Though several other administrations record a lower death rate than 1981, none show so low a figure as 14 per mille constantly sick amongst their prisoners.

Central Provinces and Berar.

With the exception of diarrhœa, anæmia and debility and diseases of the respiratory system, which caused a slightly enhanced mortality, all the causes of death were attended with a much diminished death roll as compared with the previous year. The most marked improvement is noted with regard to dysentery. Admissions to hospital from this disease fell from $95\cdot 9$ to $60\cdot 7$ per mille and deaths from $11\cdot 47$ to $3\cdot 83$. This improved state of affairs was nowhere better evidenced than in the Raipur central jail. Here in 1911 there had been 252 admissions and 33 deaths from dysentery; in 1912 there were only 35 cases and 2 deaths. Of the 35 cases 8 were admitted into jail suffering from the disease. This fact bears witness to the prevalence of dysentery amongst the free population. Careful attention was paid to the question of fly-breeding and fly-prevalence. Marked as the improvement is, dysentery still ranks first as the cause of death in the jails of these provinces.

The mortality rate from tubercle of the lungs was little more than half that of the preceding year ($3\cdot 51$ as against $6\cdot 15$ per mille).

There was one case each of plague, small-pox and cholera.

77. The daily strength of prisoners fell for similar reasons to those mentioned above in the case of Bengal. The number of prisoners received during the year were more numerous than in 1911.

Madras.

With the exception of cholera, from which there were 12 deaths as compared with 2 in 1911, respiratory diseases and diarrhœa, there was an all-round reduction in the mortality rates of the jails of Madras.

Each of the past 3 years was a record one of low mortalities. The following table is of interest:—

	1908.	1909.	1910.	1911.	1912.
Death rate per mille (from all causes) ..	29'80	25'24	15'25	13'83	11'37

This steady progress in the decline of jail mortality rates is an eloquent tribute to the jail administration of the Presidency. The smallness of this year's mortality was only bettered by the jails of one other administration, that of the United Provinces.

The constantly sick rate per mille fell from 21 to 20.

Tubercle of the lungs was responsible for more deaths than any other single cause but the death rate attributed to it, *viz.*, 2'32, compares very favourably with 3'18, the rate in 1911 and 3'12 the average rate of the decade 1902-11. The reduced admission and mortality rates from this disease in the year under report is attributed to the reduced average prison population.

The dysentery death rate, 1'10, is lower than that recorded by any other administration and compared with the decennial average of 3'52 is most satisfactory.

The Vizagapatam jail was responsible for most of the cholera cases and deaths. The Inspector-General expresses the opinion that flies were instrumental in the spread of infection.

The malaria admission and death rates were exceedingly low. The prophylactic issue of quinine was enforced in 5 jails.

No other disease was sufficiently prevalent to call for notice here.

It is satisfactory to note that the new diet which was introduced in 1908, as an experimental measure in 3 large central jails, and which has since been universally adopted in the jails of Madras, seems to have met with a large measure of success. This diet is smaller than the old scale by 5 ounces but in spite of this 68'55 per cent. of prisoners gained in weight during confinement. The average percentage that gained weight during the years 1901-07, when the old diet was in force, was 61'6. The improved health of the prisoners is attributed by the Inspector-General in no small measure to the qualities of the new dietary. There is certainly but very little room for improvement in the vital statistics presented in this year's report.

78. The daily average population of the Bombay jails shows an increase of 455 over the figure for 1911. A portion of the increase was indirectly due to the scarcity that prevailed in 3 or 4 districts of the Presidency. There was considerable overcrowding in many of the prisons.

The admission to hospital rate is in excess of that of 1911 (483'4 and 429'5, respectively) but the mortality rate from all causes shows a decline from 18'73 per mille in 1911 to 17'23 in the year under report. This figure is appreciably lower than the last decennial average, 20'49 per mille.

The rates per mille of prisoners constantly sick was 22, the same figure as was reported for 1911. Cholera attacked 5 prisons and was responsible for a death rate of 1'88 per mille of the Bombay jail population. In the Ahmedabad jail, where there were 16 cases and 7 deaths, the disease was almost certainly fly-borne. At Yerrowda (2 cases and 1 death) there was a strong suspicion that a carrier was responsible for the outbreak. Amongst the Deccan Gang there were 19 cases and 8 deaths. The cases probably arose from the drinking of water from a river which the prisoners crossed daily going to work. There was cholera in the country surrounding all three jails.

Pneumonia was the disease that entailed the largest mortality of any, though its death rate was only little more than half that of 1911 (2'32 and 4'42, respectively).

The death rate from dysentery was 1·99. The disease was more prevalent than in the previous year.

Tubercle of the lungs also caused a death rate of 1·99.

79. The average jail population of Burma was slightly larger than in 1911. The health of the prisoners was not on the whole as satisfactory in 1912 as it was in the preceding year. It is true that the constantly sick rate remained stationary at the low figure of 15 per mille, and the admission rate fell to 288·9 from 307·3, but the death rate rose from 12·28 in 1911 to 20·69 in the year under report. This death rate, 20·69, is the highest recorded since 1900 and was largely brought about by the very high rates of mortality of the jails in Rangoon (40·96) and Myingyan (38·63). Excluding these two the remaining 28 jails had a mortality of 14·78.

In Rangoon the enhanced death rate is ascribed by the Inspector-General to :—

- (1) the larger proportion of prisoners in bad health on admission (3·20 per cent. as against 0·99 per cent. in 1911), the ill-health being largely due to the opium, morphia or cocaine habit.
- (2) Overcrowding of the jails throughout the province prevented transfer of prisoners from Rangoon.
- (3) Overcrowding of Rangoon prison itself.

At Myingyan there were 19 deaths from cholera and 9 from tuberculosis. This is the only jail in which cholera assumed epidemic form. The 23 cases and 19 deaths recorded all occurred between 22nd November and 7th December. The total number of cholera attacks and deaths in all jails was 38 and 30.

Dysentery shows an increased prevalence and an enhanced mortality as compared with 1911. The admission to hospital rate rose from 15·0 per mille to 20·6 and the death rate from 1·41 to 2·39. This admission rate for dysentery is, however, considerably lower than that returned by any other administration.

Malaria was less prevalent than in 1911 though one more death from this disease occurred (7 and 6 respectively). In one jail the prisoners in hospital suffering from malaria are provided with mosquito nets.

Tuberculosis causes more deaths than any other disease and 1912 witnessed a further advance, admissions and deaths numbering 155 and 79 as compared with 110 and 42 in 1910 and 132 and 60 in 1911. This steady increase is a disquieting feature of the Burma report. Rangoon jail reported more cases and deaths from tubercle (39 and 23) than any other. The building of the separate enclosure and ward for tuberculosis has been delayed by want of funds. This would appear to be a very real want. Insein jail reports 38 cases with 21 deaths and Myingyan 32 with 9 deaths.

There were 19 cases and 3 deaths from enteric fever and 5 fatal cases of plague were reported.

An outbreak of scurvy in the Rangoon jail of 84 cases with one death merits attention chiefly because of the unusual symptoms that the disease presented. The disease was almost invariably febrile; the brawny swellings were confined to the calf and thigh; the coagulability of the blood of the patients was normal: the issue of fresh vegetables, fresh milk, meat and fish did little to improve matters whilst issues of sweet potatoes had a very beneficial effect.

80. By the Andamans, in this report, is meant the convict station of Port Blair, an area not more than 20 miles in its longest diameter, situated on the south side of the southernmost island of the group.

The average strength of its convict population was 604 less than in 1911, 11,280 as compared with 11,884.

The health conditions were not so satisfactory, the constantly sick rate rose from 62 to 75, and the admission to hospital rate and the death rate were 1,624·2 and 31·65 per mille as compared with 1,249·8 and 24·40 in 1911.

As in previous years there was no cholera and no small-pox. The admission to hospital and mortality rates from all the other chief causes of disease show an increase over those of the previous year. Pneumonia, dysentery and tubercle in this order, were the chief causes of mortality, whilst malaria as usual was by far the chief cause of sickness.

Malaria was more severe than in 1911, and caused admission and death rates of 993·7 and 2·57, respectively, as compared with 680·4 and 2·02 in the previous year. The Senior Medical Officer reports that malignant tertian was the most prevalent form of the disease. Examination of blood films of patients gave the following results :—

Malignant tertian	...	...	...	...	61·1 per cent.
Benign tertian	...	...	...	...	30·5 „
Quartan	...	...	...	...	8·4 „

Since the report of 1911 was issued, a valuable memoir has been published by Major S. R. Christophers, I.M.S., on the subject of malaria in the Andamans. He shows that *Nyssomyzomyia ludlowi* is the mosquito chiefly responsible for the spread of the disease. This anopheline breeds in brackish water and was rarely found more than a quarter of a mile from the influence of salt waters. There is a very close relationship between the amount of malaria in any given village and the propinquity of the latter to the sea coast.

In 2 out of 53 specimens of *Nyssomyzomyia ludlowi* dissected at Port Mouat, zygotes of malignant tertian were found. A very exact relation between the distribution of *Nsm. ludlowi* and malaria was demonstrated. Christophers states that, though other common species of anophelines such as *Nsm. rossi* and *My. barbirostris* may play a subsidiary part, *Nsm. ludlowi* is undoubtedly the chief carrier. Malignant tertian was the only species of parasite proved to be carried by this anopheles, but it is probable that it carries all forms of the parasite. As regards the form of parasite most prevalent, in the relatively healthy year in which the observations were made, Christophers found that in children the simple tertian was much the most common form, whereas amongst labouring convicts, less exposed to infection than children but subject to conditions favouring relapse, 50 per cent. or more of cases were quartan infections. This is explained by the greater tendency to relapse that quartan infections exhibit. That relapses play an important part in the morbidity of the convicts is demonstrated by the synchronism of the onset of the rainy season and the rise in hospital admissions for fever. The malaria endemicity of the convict station is not very high; only one village was found having a spleen rate of over 50 per cent. The prevalence of anopheles is likewise only moderate; potential mosquito breeding places are common, but many of these contain fish of the genus *Haplochilus*. This doubtless explains why mosquitos are not more numerous than they are. In spite of this moderate endemicity labouring convicts suffer much from malaria and Christophers is inclined to attribute this to deficient treatment of malaria cases in hospital.

Some observations were made in 1912 by the Senior Medical Officer as to the value of a daily dosage of 3 grains of quinine as a malaria prophylactic by its administration to inmates of the female jail. Of 94 women thus treated 64 developed malaria, whilst of 94 untreated 76 developed malaria. From this experiment one must assume that quinine in 3 grain doses daily is not a very efficient prophylactic.

There were 15 cases of fever with jaundice, all from the most malarious portions of the western district.

Dysentery shows an enhanced death rate as compared with 1911, 6·03 as against 3·70, though the prevalence of the disease was much the same. An inquiry on the subject of dysentery has just been started under the auspices of the Indian Research Fund Association and it is hoped to include the Andamans in the locale of the inquiry. There are considerations that point to a somewhat close relationship between malaria and dysentery in the Andamans.

Admission and death rates from pneumonia were higher than in 1911, this in spite of the fact that a large amount of attention was paid to the question of ventilation of the barracks during the year. There is an intimate association between the incidence of fatal lobar pneumonia and malaria infection.

Pulmonary tuberculosis exhibits an increased prevalence and a slightly enhanced mortality over 1911, but the figures for the last two years show a decided improvement in this respect.

SECTION V.

VACCINATION.

81. The total vaccination work done in British India during the year 1912-13 was represented by 9,919,723 operations, of which 8,792,917 were primary cases and 1,126,806 re-vaccinations: the corresponding figures for the year 1911-12 were 9,684,249, 8,780,525 and 903,724, respectively. It will be seen that in the total work there was an increase of 235,474 operations, made up by increases of 12,392 under primary vaccinations and of 223,082 under re-vaccinations. Increases occurred in all the provinces, except Madras, the Central Provinces and the small provinces of Coorg and Ajmer-Merwara. In regard to primary cases, there was a decrease, compared with the preceding year, in Bengal, the Central Provinces, Burma and Ajmer-Merwara, and in revaccinations Madras, the Central Provinces, Coorg and Ajmer-Merwara showed decreases. The only provinces in which there was a decrease under both classes of work were the Central Provinces (due in part to the elimination of the statistics relating to Feudatory States) and in Ajmer-Merwara.

The quality of the primary work showed an improvement on that of the preceding year, the percentage of success rising to 96·54 from 96·34, but in revaccinations the rate declined to 70·57 from 72·82. In the former the rates varied between 99·59 per cent. in Bihar and Orissa and 88·4 in Madras, and in the latter between 93·17 in Ajmer-Merwara and 53·19 in Bombay—all the rates are higher than in 1911-12.

The mean number of operations performed by each vaccinator was 1,630, to which it rose from 1,584 in 1911-12: the range between the highest and lowest was very considerable, 3,968, the highest, in the North-West Frontier Province and 911 the lowest in Ajmer-Merwara; the next lowest was 964 in Assam.

The vaccination operations performed at dispensaries numbered 187,450 compared with 149,629 the year before, but except in Bengal, and Bihar and Orissa, which between them account for 153,306 of the total, and the Punjab and Burma which jointly contribute 21,308 operations, the vaccination work at dispensaries is inconsiderable.

The ratio of successful vaccinations per thousand of the population was 36·49 in 1912-13, which lies between the ratios of 35·06 in 1910-11 and 37·22 in 1911-12. Neglecting the small province of Coorg with the high ratio of 64·66 per thousand, the extremes were 49·11 in the North-West Frontier Province the highest, and neglecting the small province of Ajmer-Merwara 25·94, 29·06 in Bombay, the lowest.

On an estimated birth rate of 40 per thousand of the population, 46·19 per cent. of the children under one year of age were successfully vaccinated, showing a decrease compared with the rate of 48·01, in the preceding year. The usual great variations occurred, the highest rates being 71·02 in the Central Provinces and 68·06 in the Punjab, and the lowest 20·10 in Burma and 8·82 in Coorg.

The cost of the department during the year 1912-13, amounted to Rs. 16,30,427 to which it increased from Rs. 15,61,261 in 1911-12. The average cost of each successful case was two annas and eleven pies, or one pie more than the year before: the cost of each case varied between nine annas and two pies in Bombay and one anna in Bihar and Orissa.

82. Reference to the vaccine lymph employed and the sources of supply in the several provinces will be found in the succeeding paragraphs. Nearly all the provinces possess their own vaccine institutions, the exceptions being Bihar and Orissa, the Central Provinces, the North-West Frontier Province and the small provinces of Coorg and Ajmer-Merwara. Steps have been taken for providing a vaccine depôt for Bihar

and Orissa, and for the Central Provinces the establishment of a vaccine depôt has been sanctioned, towards the cost of which the Government of India have made a grant of Rs. 50,000. For the improvement of the vaccine depôts in the United Provinces, the Punjab and Burma, the Imperial Government have also made grants of half a lakh to each.

83. In consequence of the creation of the Delhi province, the vaccination statistics for 1912-13 have been rendered separately from those of the Punjab. The total number of vaccination operations performed during the year was 13,232, of which 11,267 were primary cases and 1,965 revaccinations, showing decreases of 14,576, 8,098 and 6,478, respectively, compared with 1911-12. The falling off in primary work is accounted for by the large number of persons vaccinated in the Durbar area during the preceding year, and also to the transfer of two tehsils to the Punjab, while that in revaccinations is explained by work having been done in two jails only instead of in seven as was the case the year before. The percentage of success in primary cases was 98·13, and in revaccinations 65·25. House to house vaccinations were done in three places.

On an estimated birth rate of 40 per thousand of the population, 63·32 per cent. of the children under one year of age were successfully vaccinated. In Delhi city where the Vaccination Act is in force, 66·9 per cent. of the infants calculated to be available were protected.

The cost of the department was Rs. 2,403, and the average cost of each successful case three annas and three pies.

84. The vaccination report for 1911-12 related to Bengal as constituted before the revision of the partition, while that for 1912-13 relates to the province as now constituted; the figures for the two years as herein stated are for the same areas, those of the former year having been compiled for purposes of comparison. The total number of vaccination operations during 1912-13 was 1,984,399 against 1,946,584 in the previous year. Primary cases numbered 1,787,143 and revaccinations 197,256, compared with 1,803,652 and 142,932, respectively, showing a decrease of 16,509 in the former and an increase of 54,324 in the latter. The improvement in revaccination was due to a greater prevalence of small-pox during the year. Compared with the previous year there was an increase of operations in 15 and a decrease in 12 districts. The largest increases were in Midnapore (27,339), Dacca (17,422), Chittagong (16,971), Mymensingh (14,020) and Tippera (11,135), and the largest decreases in Bakarganj (12,113), Faridpur (12,048) and Khulna (11,744). The diminished work in Bakarganj is attributed to the aversion of the Ferazi Muhammadans to vaccination, to the difficulty in obtaining good vaccinators due to trouble in the realization of vaccinator's fees, and to the attitude of the people: various reasons are assigned for the decreases that occurred elsewhere.

The ratio of success in primary vaccination was 98·24 and in revaccination 61·29 per cent., respectively.

On an estimated birth rate of 40 per thousand of the population, 36·41 per cent. of the children under one year of age were successfully vaccinated, and in municipalities 75·2 per cent. of the available infants were afforded protection. It is stated that the Eastern Bengal districts are mostly responsible for the low rate of infant protection and steps are being taken to ensure better results in future.

Vaccination was performed with lymph direct from the calf, lanoline lymph, glycerinated lymph from the Shillong vaccine depôt and the arm-to-arm method. The percentages of success by each method were—the figures in brackets are for the previous year—primary cases, 98·51 (99·81), 98·19 (98·39), 97·28 (96·75) and 90·10 (*nil*), and revaccinations, 44·78 (54·13), 43·54 (44·50), 62·55 (63·68) and 77·51 (50·24).

At the Calcutta animal vaccination depôt 2,253 calves were vaccinated and 6,75,228 grains of lymph manufactured, the corresponding figures for 1911-12,

being 1,973 and 568,113, respectively. The requirements of lymph of the districts of Bihar and Orissa were supplied by the Calcutta depôt, and those of the districts of Eastern Bengal by the Shillong depôt.

The cost of the department during 1912-13 amounted to Rs. 1,72,212 and the average of each successful case was one anna and six pies.

85. The vaccination returns of the newly constituted province of Bihar and Orissa are rendered separately for the first time for 1912-13. The total number of operations performed during the year was 1,296,313 of which 1,269,400 were primary cases and 26,913 revaccinations. In 1911-12 the total number of operations was 1,316,089. The most noticeable decreases occurred in Cuttack (18,212), Champaran (4,944) and Monghyr (4,191). In the two latter places it is attributed to the prevalence of cholera and plague.

The percentage of success in primary operations was 99.59 and in revaccinations 69.35.

The provincial Sanitary Commissioner remarks that at the present time the ratio of mortality from small-pox compared with the number of successful vaccinations, shows that the former is lower and the latter higher than it has been at any time during the last decade.

On an estimated birth rate of 40 per thousand of the population, 47.01 per cent. of the children under one year of age were protected. For all municipalities the percentage of the infants successfully vaccinated was 73.59. It is said that the attention paid to vaccination in rural areas does not seem to have extended to municipalities. In the towns of Gaya, Bihar, Dinapore, Chapra, Darbhanga, Monghyr, Jamalpur, Bhagalpur, Cuttack and Hazaribagh, the records show that of a total of 11,814 available children only 6,316 or a little over a half were vaccinated.

Lanolinated lymph was supplied to all districts from the Calcutta depôt. It was of good quality and the work done with it is reported to have been very satisfactory. Plans and estimates for a vaccine depôt for the province, to cost Rs. 1,44,000, have been sanctioned and the building is being put in hand.

The total cost of the department was Rs. 82,305, and the average cost of each successful case one anna.

86. The total number of operations performed during the year amounted to 333,363 compared with 305,845 in 1911-12, showing an increase of 27,518 operations. Of the total 298,983 were primary cases and 34,380 revaccinations, against 290,915 and 14,930, respectively, in 1911-12. The increase in vaccination work occurred in 9 out of 12 districts and one Native State, and was specially noticeable in the Sylhet district where vaccination was vigorously pushed as a preventive measure against small-pox, which was prevalent in several villages. The experiment to work the district with licensed vaccinators is unlikely to be successful owing to difficulties in the realization of vaccinators' fees.

It is satisfactory to note that among the "Mahapurushias," in the Kamrup district, who are notorious in their objection to vaccination on religious grounds, 6,422 operations were performed.

The percentage of success was 97.91 in primary cases and 73.99 in revaccinations, against 98.14 and 80.98, respectively, in the previous year.

Legal action was taken against a Gonok found inoculating in a village in the Sylhet district.

Dispensary vaccination, which is not considerable, is now carried on in the hill districts only.

On an estimated birth rate of 40 per thousand of the population, 23.44 per cent. of the children under one year of age were protected, as compared with 21.98 in 1911-12. In the areas where the Vaccination Act is in force, 62 per cent. of the total number of children under one year available for vaccination were successfully vaccinated, against 79 per cent. in the previous year. In the town of

Sylhet only one-fourth of the available children were vaccinated. This unsatisfactory state of affairs is reported to be due to the fact that on account of small-pox in the towns, the vaccinators were largely engaged in persuading people to accept revaccination. The attention of the Civil Surgeon and the Municipal Commissioners is being drawn to this failure to carry out primary vaccinations.

All the vaccination operations were performed with glycerinated lymph manufactured at the vaccine dépôt at Shillong, the quality of which is reported to have been excellent. The number of tubes loaded during the year was 1,819,859 against 1,716,938 in the previous year, and the average cost per tube was 2'4 pies. Plans and estimates for a new dépôt are under consideration.

The total cost of the department was Rs. 66,343 against Rs. 64,501 in the previous year, and the average cost of each successful case was three annas and six pies or two pies less than in 1911-12.

87. Vaccination work in the United Provinces again showed an improvement in United Provinces. 1912-13. The total number of operations performed was 1,592,438 (1,468,162 primary and 124,276 revaccinations) against 1,494,557 in 1911-12, showing an increase of 97,881 operations. Of the 48 districts there was an increase in the number of successful primary operations in 41. Of these Budaun shows the greatest (6,518) followed by Bulandshahr (5,238), Azamgarh (4,196), Meerut (3,341), Etah (3,300) and Gonda (3,280). There were decreases in 7 districts, *viz.*, Kheri (12), Allahabad (29), Rai Bareilly (63), Agra (532), Almora (1,466), Sultanpur (1,795) and Hardoi (3,341). In Kheri, Allahabad, Almora and Sultanpur there was, however, an increase in the number of successful revaccinations. Various reasons are given in explanation of the diminished work.

The percentage of success in primary cases was 97'19 as compared with 97'65 in 1911-12, and in revaccinations 73'12 as compared with 78'13, showing a decline in both classes of operations.

On an estimated birth rate of 40 per thousand of the population, 52'73 per cent. of the children under one year of age were successfully vaccinated as compared with 50'28 in the previous year. The total number of successful vaccinations performed on children under one year of age in municipal towns was 83,031, showing a percentage of 89'3 of the number calculated to be available.

At the bovine lymph dépôt, Patwa Dangar, great difficulty was experienced in obtaining a sufficient supply of suitable calves. An outbreak of rinderpest occurred and steps were taken for the inoculation against the disease of all calves coming from infected districts. During the year 386 calves (259 cows and 127 buffaloes) were operated upon of which 355 (239 cows and 116 buffaloes) proved successful, against 387 and 370, respectively, during the previous year. The total quantity of crude lymph obtained was 11,285 grammes against 9,335'6 grammes in the preceding year, the average yield per cow calf being 22'1 grammes and that per buffalo calf 51'7 grammes against 19'9 and 36'6 grammes, respectively, in 1911-12. From the 11,285 grammes of crude lymph obtained, 69,742 grammes of glycerinated lymph and 1,256'4 grammes of glycerine paste were prepared. In the absence of a demand, lanoline paste was not manufactured. The decrease in the issue of lymph in glass tubes and the increase in its supply in bulk in metal tubes, continued during the year. Arm-to-arm vaccination has now been replaced by vaccination by calf lymph in 35 districts, 13 districts having been added during the year. It is proposed to take up two districts more during the next season, bringing the total to 37 districts.

The total cost of the department during the year amounted to Rs. 1,80,512, against Rs. 1,53,200 in the previous year. The average cost of each successful case was one anna and nine pies against one anna and seven pies in the preceding year. The increase in expenditure is chiefly due to the improvement in the pay of the vaccine staff, and to increased expenditure on the bovine lymph dépôt consequent on the expansion of the use of calf lymph in place of arm-to-arm vaccination.

88. The amount of vaccination work done in the province during 1912-13 was very satisfactory, being 16 per cent. in excess of the figure for the previous year, and 39 per cent. greater than the average for the previous quinquennial period. The total number of operations performed amounted to 1,032,847 against 892,289 in 1911-12. The appreciable rise is ascribed to the increased demand for protection against small-pox which was widely prevalent in the province: over 30,000 deaths occurred from the disease during the year, the highest number recorded since 1896. The increase in small-pox was brought to the notice of all Civil Surgeons and the necessity for special attention being given to primary vaccination and revaccination was urged.

Of the total number of operations, 710,994 were primary and 321,853 revaccinations compared with 701,700 and 190,589, respectively, in the previous year. It will be noticed that the increase is principally in revaccinations. Increases in primary operations occurred in 17 districts and decreases in 11, the most noticeable of the latter being, Lahore (9,109), and Gujrat (5,851). The diminution is explained as due to the smaller number of children available. In regard to revaccination there was an increase in 21 districts and a decrease in 7, the largest among the latter occurred in Lahore (6,500). The percentage of success was 97.99 in primary cases and 73.50 in revaccination against 95.03 and 71.85 in 1911-12, showing an improvement under both heads.

House-to-house vaccination was only carried out in a few districts, as the system did not prove a success in others. The Gurdaspur district is the only one in which the system has proved popular and is said to be possibly due to the district being fortunate in its staff. The number of operations performed in some of the Hill States is almost incredible. The highest percentage of population successfully vaccinated during the year in British territory was 9.2 in Dera Ghazi Khan, while in the small Hill States of Mangal and Kuthar the percentages reached were 31 and 45, respectively, and in the larger States of Rampur, Bilaspur and Nalagarh percentages of 11, 13 and 15 were recorded.

The vaccinations performed at dispensaries increased to 10,603 from 1,590 in 1911-12. Of the total no less than 9,092 operations were performed in four districts which were badly infected with small-pox.

On an estimated birth rate of 40 per thousand of the population, 68.06 per cent. of the infants were protected, compared with 65.79 in the previous year. In municipal towns in which the Vaccination Act is in force, 83 per cent. of the total number of children under one year of age available for vaccination were protected, as compared with 70 per cent. in those towns in which the Act is not in force: the corresponding figures for 1911-12 were 86 and 64 and for the quinquennial period 79 and 63, respectively. No municipal town was brought under the operation of the Vaccination Act during the year.

The principal buildings of the vaccine institute at Lahore were completed during the year 1912; certain additional improvements are being carried out, such as the provision of new stables for the separate housing of pre and post-operative calves and for the isolation of the sick. During the year 284 calves were successfully vaccinated, and the average yield of crude lymph was 43.3 grammes from each buffalo calf and 15.8 grammes from each cow calf.

The institute supplied vaccine lymph to all districts in the Punjab, to 26 Native States, to the North-West Frontier Province, Kashmir, Baluchistan, Sind, Kathiawar, Nepal, Tibet and Afghanistan, to military medical officers in the Punjab and the North-West Frontier Province and to private individuals. The method of preparation and testing of chloroformed glycerinated vaccine was the same as before. The virulence of stock lymph was successfully maintained by alternate passage from buffalo to cow calf and *vice versa*. Vaccine lymph was supplied to the Bangalore and Belgaum vaccine institutes with which potent strains were successfully established. The total number of tubes issued was 34,942 as compared with 28,971 in the previous year; reports of the results obtained were very satisfactory. From the Attock, Rohtak and Dehra Ghazi Khan districts, however, complaints were received that the chloroformed glycerinated vaccine did not confer immunity to small-pox. Searching enquiries were held on the spot, in several places, but no

satisfactory evidence was forthcoming against the potency of the lymph. The subject is still under enquiry and a general investigation throughout the province is proceeding.

The total cost of the department amounted to Rs. 1,25,812, or an increase of Rs. 1,492 compared with last year. The excess is chiefly on account of the increased demand for vaccine obtained by local bodies, on payment, from the Institute. The average cost of each successful operation during the year was 2 annas and 4 pies as compared with 2 annas and 8 pies in the previous year.

89. The total number of operations performed in the North-West Frontier Province, including agencies, during the year was 152,740, of which 125,109 were primary operations and 27,631 revaccinations, against 112,579 and 21,223, respectively, in the previous year—increases of 12,530 in the former and 6,408 in the latter. The increase in revaccinations is small compared with the increase of over 13,000 in the previous year. The Bannu district again had the largest increase in both classes of work, Peshawar and Kohat coming next. There has been an increase in the work under every heading in each district, the least marked being in the number of revaccinations. People readily bring their children for vaccination, especially if small-pox is prevalent or threatened, but the utility of revaccination is not yet grasped by the poorer classes.

The total number of persons vaccinated in the agencies and in the Sherani country was 10,343, a decrease of 1,760 as compared with the previous year. This decrease is accounted for by the absence of any report from the Amb State where 2,000 persons were vaccinated in 1911-12. Reports from the agencies indicate that the people have no prejudice against vaccination, and that the relations existing between the villagers and the vaccinating staff are good.

The number of successful primary vaccinations was the highest ever recorded, the figures being 120,285 against 107,123 in the previous year. The percentage of successful primary cases and revaccinations was 99.01 and 88.88 against 98.74 and 83.66, respectively, in the previous year.

On an estimated birth rate of 40 per thousand, 62.85 per cent. of the children available were protected compared with 50.88 per cent. in the previous year. In municipalities, as usual, the number of children under one year of age vaccinated, exceeded the number calculated to be available. The reason is that all births are not registered and many children not born in the towns are brought in for vaccination.

The lymph used during the year was supplied by the Punjab vaccine institute, and gave excellent results.

The total cost of the department during the year was Rs. 15,236 and the average cost of each successful vaccination amounted to one anna and eight pies as compared with Rs. 15,493 and two annas, respectively, in the previous year.

90. The area served by the vaccination department in the Central Provinces remained the same as in the previous year, but under the orders conveyed by the Government of India, the statistics of the Feudatory States have been omitted. The total number of vaccination operations during the year 1912-13 amounted to 574,510 (503,956 primary cases and 70,554 revaccinations) against 583,101 (512,312 primary and 70,789 revaccinations) in the previous year. Decreases occurred in 12 districts and were most marked in Raipur (7,657), Chanda (5,944), Nagpur (3,231), Akola (3,039), Damoh (1,766) and Bhandara (1,271): in the remaining six districts the fall was of less than 1,000. In all the districts the chief cause of the decrease was the prevalence of cholera and the consequent deputation of the staff on cholera duty, but in Damoh and Bhandara, plague accounted for the decrease to some extent, while in Nagpur and Raipur the results were affected by fewer infants being available owing to a lower birth rate and higher mortality. The provincial Sanitary Commissioner remarks that notwithstanding the prevalence of small-pox, revaccination has not made any headway. It has been suggested that the revaccination of children of 12 to 13 years of age in primary schools can be done without much

trouble, provided the age is not considered too early. The Sanitary Commissioner drew up a leaflet on the subject, which was sent to the Director of Public Instruction for issue to schoolmasters who are the best disseminators of elementary knowledge in rural tracts. Complaints were numerous regarding the inadequacy of the staff, both in numbers and intelligence. In many districts men are hardly to be obtained at all, and generally the class of man available is much below what is required. It is held that better salaries must be offered and a better stamp of man obtained for both work and supervision. Several improvements were, however, effected during the year, *viz.*, the grant of allowances in certain districts where there was much dissatisfaction among the vaccinating staff; more attention paid to the clauses of the Vaccination Act, the system of notices and prosecutions being enforced with good results; the supply, in some districts, of instrument cases to the staff; efforts made to improve the diagnosis of small-pox by the issue of leaflets; introduction of a system of tour programmes for the staff.

The percentage of success was 98·29 in primary cases and 72·90 in revaccination.

On an estimated birth rate of 40 per thousand of the population, 71·02 of the infants were successfully vaccinated compared with 69·18 per cent. the year before. In municipal towns the number of children under one year of age successfully vaccinated exceeded the number calculated to be available: this is accounted for by wrong classification of age, the presence of immigrants, and the fact that among the infants who died and therefore not reckoned as available, many may have been vaccinated. The introduction of school inspections, the co-operation of schoolmasters and the more careful application of the Vaccination Act have, produced an improvement. The extension of the Act to notified areas is much to be desired.

Glycerinated calf lymph prepared at the head-quarters stations was used in 18 districts, while in the remaining four the vaccinators were allowed to prepare their own supply. A central vaccine depôt has been sanctioned, towards which an Imperial grant of Rs. 50,000 has been made, and the equipment is now being received from England. The depôt is to be started on tentative lines at the Lunatic Asylum, Nagpur.

The cost of the department amounted to Rs. 69,385 as compared with Rs. 72,643 in 1911-12, and the average cost of each successful case was two annas and one pie as against one anna and ten pies the year before.

91. The total number of operations in the Presidency decreased from 1,602,977 in 1911-12 to 1,586,344. Primary operations rose to 1,461,790 from 1,455,485, but revaccinations fell to 124,554 from 147,492 in 1911-12. The largest increases were recorded in the districts of Salem (11,261), Madura (7,623), Guntur (7,498) and Kistna (5,427), and the greatest decreases in Malabar (24,002), Ganjam (10,387), Cuddapah (3,613) and South Canara (3,047). The decreases are variously accounted for by the prevalence of epidemic diseases, insufficient staff and to the absence of small-pox in epidemic form.

The percentage of success in primary cases fell to 88·4 from 89·7 in the previous year, but in revaccinations it rose from 77·2 to 79·0.

On an estimated birth rate of 40 per thousand of the population, 34·36 per cent. of the infants were successfully vaccinated as compared with 34·89 per cent. in the previous year. In municipal towns 73·5 per cent. of the available infants were afforded protection against 71 per cent. the year before.

Lanoline paste from the King Institute, Guindy, was used in all the local fund districts and municipalities. The percentage of success in the local fund area fell from 89·6 in 1911-12 to 88·0, and similarly in municipalities from 93·2 to 92·7. Glycerinated lymph yielded a percentage of success of 95·1 against 97·6 in the preceding year, and was used only by the Madras Corporation.

The cost of the department amounted to Rs. 3,28,342 against Rs. 3,16,559 during 1911-12, and the average cost of each successful case was 3 annas and 11 pies against 3 annas and 9 pies in the previous year.

92. The total number of vaccination operations performed in Coorg again showed a fall, the number declining from 13,369 in 1911-12 to 13,073 in 1912-13; of the total 8,977 were primary cases and 4,096 revaccinations against 8,425 and 4,944, respectively, in the preceding year. The percentage of success was 94·64, in the former and 81·98 in the latter, against 94·83 and 81·92, respectively, in 1911-12.

On an estimated birth rate of 40 per thousand of the population, 8·82 per cent. of the children available were protected compared with 8·54 per cent. in 1911-12. In municipal areas between October 1911 and September 1912, there were 224 births and 162 children under one year of age were vaccinated, 102 of them successfully.

The total cost of the department amounted to Rs. 2,876 against Rs. 2,818 in 1911-12, and the average cost of each successful case was 4 annas and 2 pies, or four pies more than the year before.

93. The total number of vaccination operations performed in the Bombay Presidency during 1912-13 was 782,170 of which 711,222 were primary cases and 70,948 revaccinations, against 692,413 and 68,707, in 1911-12, showing increases of 18,809 and 2,241, respectively. There was an increase in primary vaccinations in all the districts except the Sind Registration District and the Presidency Circle. The decrease in Sind is attributed to several causes, the principal ones being a reduction in the number of children available for vaccination, the large number of operations performed in the two preceding years during epidemics of small-pox, the difficulty of obtaining vaccinators and opposition to vaccination. A report on the working of the experimental scheme relating to the control of vaccinators by local bodies which was tried for a further period of 12 months, was submitted to Government for consideration.

The percentage of success in primary cases and revaccinations was 97·99 and 53·19, respectively, against 99·00 and 51·18 in the previous year.

On an estimated birth rate of 40 per thousand of the population, 56·43 per cent. of the children available were protected as compared with 55·36 per cent. in the preceding year. In towns the number of children successfully vaccinated again exceeded the number calculated to be available.

At the vaccine institute, Belgaum, certain extensions and alterations were proposed. During the year 775,587 doses of vaccine lymph were distributed including supplies to Native States, against 673,812 doses in 1911-12. The results of the vaccine issued to vaccinators in the Presidency show case and insertion success rates of 97·95 and 93·85, respectively, against 99·21 and 95·70, respectively, in the previous year.

The following table shows the several descriptions of lymph used, the number of operations performed with each, and the comparative results obtained :—

Districts.	Description of lymph.	NUMBER OF OPERATIONS.		SUCCESSFUL CASES, EXCLUDING "UNKNOWN."		PERCENTAGE OF SUCCESS, EXCLUDING "UNKNOWN."	
		Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.
Western Registration District	Glycerinated	133,961	10,803	115,388	5,013	96·71	62·87
Presidency Circle	Animal	5,843	1,854	5,291	85	99·18	67·46
	Glycerinated	15,517	13,831	13,975	14	97·75	29·17
Central Registration District	Glycerinated	162,804	8,121	149,378	4,277	92·63	77·45
Southern Registration District	Human	15,161	441	15,147	393	99·93	89·12
	Animal	4,195	73	4,191	73	99·90	100·00
	Glycerinated	131,311	18,244	124,916	7,711	98·97	56·17
	Human	27,375	2,443	26,894	236	98·90	9·72
Gujarat Registration District	Glycerinated	103,509	3,970	93,053	1,408	95·42	47·71
	Human	75,132	2,974	66,572	1,492	98·61	71·18
	Animal	2,833	1,249	2,668	490	99·07	81·26
Sind Registration District	Glycerinated	18,040	692	15,819	281	94·75	57·11

The total cost of the department during the year, amounted to Rs. 3,76,586 compared with 3,53,707 in 1911-12. The average cost of each successful case was 9 annas and 2 pies against 8 annas and 9 pies in the previous year.

94. Vaccination work in Burma during the year 1912-13 again showed an improvement when the total operations numbered 544,352 as compared with 517,392 during 1911-12. Of the total, 422,089 were primary operations and 122,263 revaccinations. As compared with the returns for 1911-12 the total of primary operations was 432 less and that of revaccinations 27,392 more, the total of all operations being 26,960 in excess of the number in the previous year. The great increase in revaccination work is attributed mainly, if not entirely, to the prevalence of small-pox in many districts. In the Pegu division, however, there was a fall in revaccinations towards which Rangoon contributed 11,036 and the Prome district 4,501; the Amherst district also showed a fall of 1,411.

The percentage of success in primary cases was 96.69 against 96.61 in the previous year, and in revaccinations, 67.64 against 71.79.

At dispensaries a total of 10,705 operations were performed, of which 5,968 were primary cases and 4,737 revaccinations.

On an estimated birth rate of 40 per thousand of the population, 20.10 per cent. of the children available were protected as compared with 19.02 in the previous year. In towns the number of infants successfully vaccinated exceeded the number calculated to be available. This is a constantly recurring phenomenon and is generally attributed to infants from outside being brought into the towns, but it is also probably due to errors in the registration of births.

Reference is made to inoculators being active in many districts, and in the Thaton, Pyapon and Pegu districts outbreaks of epidemic small-pox were directly traced to their action. One inoculator was sentenced to 9 months' rigorous imprisonment, and a number were convicted and fined.

The total amount of glycerinated vaccine prepared at the Meiktila vaccine depôt was 760,294 doses, of which 757,518 doses were issued, as compared with 693,913 in 1911-12 and 613,444 in 1910-11. The quantity of lymph prepared and issued during 1912-13 is the largest on record. The potency of the strain was maintained by vaccine lymph taken from inoculated rabbits and on three occasions by the use of human lymph for inoculating calves. The local strain was found more potent than the lymph obtained from Bombay and the United Provinces. The Director of the institute points out that the buildings provided for the preparation of lymph are far too small for the greatly increased work of the department which has risen by nearly 300 per cent. since 1903-04. The matter has, however, been in abeyance for want of funds, but a grant of Rs. 50,000 for the improvement of the depôt has been made by the Imperial Government, and the preparation of plans, etc., are now to be proceeded with.

The total cost of the department during the year was Rs. 2,05,199, an increase of Rs. 4,595 on the previous year's expenditure. The average cost of each successful operation was 7 annas and 3 pies, which is two pies less than in 1911-12.

95. In Ajmer-Merwara the total vaccination operations during 1912-13 numbered 13,825 primary cases and 117 revaccinations compared with 15,486 and 1,034 in the preceding year. The percentage of success in the two classes of work were 95.21, and 93.17, respectively, against 98.17 and 81.81 in 1911-12.

On an estimated birth rate of 40 per thousand of the population, 53.86 per cent. of the children under one year of age were protected compared with 47.36 per cent. in the previous year.

The total cost of the department during 1912-13 amounted to Rs. 3,216 against Rs. 3,098 in 1911-12; the average cost of each successful case was 3 annas and 11 pies as compared with 3 annas and 2 pies in the previous year.

96. Particulars of vaccination in the Army will be found in Statement III of the appendix to this section.

Vaccination among troops.

SECTION VI.

MEDICAL INSTITUTIONS.

(CONTRIBUTED BY THE DIRECTOR GENERAL, INDIAN MEDICAL SERVICE).

A.—*Civil Hospitals and Dispensaries (State-Public, Local Fund, and Private aided).*

97. These institutions, at the end of 1912, numbered 2,733, an increase by 26 on the figure for 1911, and everywhere the demand for more is making itself felt. The travelling dispensary system which has been so successful in the United Provinces and the Punjab is being introduced elsewhere as well. The number of persons treated has risen in spite of the healthiness of the year to 29½ millions; and operations are being more freely resorted to than ever.

Expenditure rose from £863,168 in 1911 to £904,449; and there is little reason to believe that further economies will reduce this amount. Again this year the assistance afforded by individual subscriptions by Indians shows a tendency to diminution,—the amount subscribed in 1912 being only £45,557, as compared with £47,252 in 1911.

The following tabular statement shows the main features of the operation of these institutions during 1911 and 1912:—

Province.				Number of Institutions.	Number of In-patients.	Number of Out-patients.	Total number of patients.	Number of operations.
Eastern Bengal and Assam	...	{	1911	373	24,584	3,695,044	3,719,628	83,043
			1912	figures not available; shown partly under Assam and partly under Bengal.				
Assam	...	...	1912	147	8,754	1,530,551	1,539,305	24,904
Bengal, excluding Calcutta	...	{	1911	360	45,791	3,224,508	3,270,299	146,950
			1912	399	35,056	3,719,041	3,754,097	114,174
Calcutta	...	{	1911	15	25,819	303,410	329,229	33,754
			1912	15	27,856	310,066	337,922	36,113
Bihar and Orissa	...	...	1912	195	30,203	2,073,073	2,103,276	126,860
Central Provinces	...	{	1911	167	13,449	1,717,846	1,731,295	43,699
			1912	168	13,926	1,697,344	1,711,270	45,702
United Provinces	...	{	1911	379	65,954	4,234,550	4,300,504	199,704
			1912	383	70,194	4,245,694	4,315,888	204,756
Punjab	...	{	1911	302	74,884	4,022,865	4,097,749	233,637
			1912	307	84,967	4,424,584	4,509,551	251,865
Burma	...	{	1911	188	57,896	1,411,143	1,469,039	43,116
			1912	190	59,842	1,507,167	1,567,009	46,618
Bombay	...	{	1911	335	55,891	2,135,640	2,191,531	92,365
			1912	336	59,534	2,293,705	2,356,118	100,255
Madras	...	{	1911	514	80,829	5,878,225	5,959,054	225,335
			1912	516	85,371	6,119,400	6,204,771	238,734
North-West Frontier Province	...	{	1911	49	11,352	750,323	761,675	32,892
			1912	50	12,536	783,531	796,067	36,117
Baluchistan	...	{	1911	25	4,222	221,622	225,844	4,565
			1912	27	4,559	252,607	257,166	5,298
Total	...	{	1911	2,707	460,671	27,595,176	28,055,847	1,139,060
			1912	2,733	492,798	28,956,763	29,452,440	1,231,396

It will be observed that, on account of the redistribution of the areas hitherto shown as Bengal and Eastern Bengal and Assam into three provinces, *viz*, Bihar and Orissa, Assam and Bengal, the figures in these areas are not comparable with those of 1911.

98. In the redistribution above mentioned there was a large transfer of hospitals to the new province of Bihar and Orissa; and many were brought in by the inclusion of Eastern Bengal.

Bengal (excluding Calcutta).
Measures are being taken in some of the larger institutions to build wards for tubercle cases, and to improve the nursing. The expenditure during the year amounted to £68,182, of which Indian subscriptions covered £13,316.

99. There was an all round increase of attendance. More nurses were sanctioned for the Eye, Campbell and Howrah hospitals. Calcutta.
Paying patients pay about 11·5 per cent. of the cost of these institutions. The total expenditure amounted to £81,700 and Indian subscriptions to £2,760. A children's ward is being built at the Eden hospital, and the surgical block of the Sambhu Nath hospital has been completed.

100. The system of travelling dispensaries has just been instituted on a small scale, in the Lushai and Naga hills. There was an increase in numbers treated in the province of 9 per cent. The temporary dispensaries opened at fairs have done useful work in treating over 94,000 cases. The total expenditure was £20,917, of which sum £1,320 was met by Indian subscriptions. Assam.

101. More dispensaries are required. The itinerant dispensaries are doing good work, as are those opened at fairs. Attendance at all institutions continues to increase. The sale of quinine by many agencies has been pressed during the year. Bihar and Orissa.

The total expenditure was £46,394 and Indian subscriptions amounted to £7,272. It is proposed to build a hospital for Europeans at Ranchi and to improve the accommodation at Patna and Bankipore.

102. The introduction of travelling dispensaries in the less settled parts of the country is under contemplation. There has been an increase in the number of Civil Assistant Surgeons. The necessity for more family wards, as opposed to general wards, is commented on by the Inspector-General. Total expenditure was £33,718 and Indian subscriptions amounted to £5,517. Central Provinces.

103. Treatment by travelling dispensaries has been very successful; the number of these institutions is now 57 and they treated over half a million persons. The new Medical College was formally opened; a tuberculosis sanitarium for open air treatment is in operation. An increasing number of native midwives take advantage of courses of instruction. Expenditure during 1912 was £101,732 and Indian subscriptions amounted to £9,221. United Provinces.

104. Although the year was a healthy one there was a very marked increase in the number of patients; thus, in-patients rose from about 75,000 to 85,000, and out-patients from 4 millions to nearly 4½ millions. Consequently there was some overcrowding. The system of charging fees to those who can afford to pay has been tried in some districts, with varying degree of success; in some parts it is unpopular. There is urgent need for improvemet in many of the smaller dispensaries. Punjab (including Delhi).

The total expenditure was £89,516—an increase of £11,000—and towards this sum Indians subscribed £2,454.

105. The numbers coming for treatment continue to increase. Two travelling dispensaries have been started and are a great success. The expenditure amounted to £13,343, an increase of nearly £2,500; but Indian subscriptions fell to £74. North-West Frontier Province.

106. A new dispensary has been opened at Nushki, and several existing ones are being modernised. There has been a marked increase in the number of patients; this is well marked among musulman women. The expenditure amounted to £8,351 of which sum Indians subscribed £23.

107. There has been a further well marked rise in attendance, by nearly 100,000 patients. The Rangoon General hospital is in working order, but a large staff of medical officers and nurses is required. The cadre of civil assistant surgeons in the province has been increased; that of sub-assistant surgeons is still below strength. The total expenditure was £107,928 and Indian subscriptions amounted to £1,521.

108. There is an increasing demand for State dispensaries. There is a movement in favour of the institution of tuberculosis hospitals, and it is hoped the larger municipalities will take up this matter. Expenditure amounted to £149,399 and Indian subscriptions to £1,397, the latter figure showing a decline of £250.

109. There was an all round increase in attendance, although the year was healthy. More operation and labour cases among women are seeking admission. The midwives treat large numbers in their own homes. The total expenditure amounted to £183,269, a large increase on last year, and Indian subscriptions to £1,682.

B.—Civil Hospitals and Dispensaries.—(State-Special, Railway and Private non-aided).

110. The number of these institutions and of patients is as detailed in the following tables.

State-Special and Railway Hospitals.

Province.				Number of institutions.	In-patients.	Out-patients.	Total.	Operations.
Bengal (excluding Calcutta)	...	...		81	12,530	246,406	258,936	7,464
Calcutta	...	...	...	2	3,604	4,493	8,097	392
Assam	...	...	...	47	3,333	59,401	62,734	835
Bihar and Orissa	...	...	...	67	512	161,109	161,621	5,185
Central Provinces	...	...	...	70	3,336	131,925	135,261	2,263
United Provinces	...	...	...	126	18,478	270,222	288,700	6,459
Punjab	...	...	...	155	6,869	465,673	472,542	18,549
North-West Frontier Province	...	...		27	7,418	122,877	130,295	3,235
Baluchistan	...	...	...	8	1,837	54,159	55,996	945
Burma	...	...	...	74	14,496	205,562	220,058	3,510
Bombay	...	...	...	70	10,583	227,339	237,922	5,238
Madras	...	...	...	99	10,354	205,118	215,472	4,613
Total	...	{	1912	826	93,350	2,154,284	2,247,634	58,688
			1911	829	89,347	2,030,098	2,119,445	52,840

Private, non-aided institutions.

Province.				Number of Institutions.	In-patients.	Out-patients.	Total.	Operations.
Bengal (excluding Calcutta)	...	...	...	136	6,304	1,089,450	1,095,754	24,046
Calcutta	...	...	...	2	...	4,822	4,822	189
Assam	...	...	...	11	73	40,928	41,001	543
Bihar and Orissa	...	...	...	66	8,403	697,913	706,316	21,681
Central Provinces	...	...	...	32	1,490	124,347	125,837	2,293
United Provinces	...	...	...	49	5,459	348,488	353,947	8,948
Punjab	...	...	...	7	4,162	52,928	57,090	3,403
North-West Frontier Province	...	...	...	7	1,811	63,884	65,695	12,292
Baluchistan	...	...	...	4	138	28,624	28,762	926
Burma	...	...	...	1	136	460	596	...
Madras	...	...	...	45	9,184	295,177	264,361	13,476
Bombay	...	...	...	309	14,639	2,027,366	2,042,005	59,623
Total				669	51,799	4,774,387	4,786,186	147,420
				706	48,796	4,712,616	4,761,412	140,640

C.—Lunatic Asylums.

111. The table below shows the strength of the asylum population in 1912, and the statistics of sickness and mortality.

The population increased during the year by 409, and the number of discharged cured rose from 676 to 771. The daily average sick continues to rise; in 1910 it was 397.58, in 1911, 516.19 and in 1912, 582.01; and the number of deaths rose from 548 to 776. The reasons given for these increases vary; but generally it appears that tubercle is becoming more prevalent. Overcrowding no doubt contributes largely to the amount of sickness; and year by year, with an increasing number of admissions, the overcrowding makes itself more acutely felt. The new asylum under completion in Bombay will no doubt improve the position in that Presidency; but there is urgent need for the new institution it is proposed to build in Bihar, especially for European patients—

Province.				Number of asylums.	Admitted and re-admitted during year.	TOTAL ASYLUM POPULATION.			Discharged cured.	Died.	Daily average strength.	Daily average sick.	Criminal lunatics.
						Males.	Females.	Total.					
Bengal	...	...	...	3	265	1,079	230	1,309	117	85	1,063.46	84.57	617
Assam	...	...	...	1	66	245	53	298	16	47	232.25	24.76	98
Bihar and Orissa	...	...	...	1	72	254	50	304	21	26	246.30	12.56	117
United Provinces	...	...	...	3	406	1,222	369	1,591	155	118	1,234.02	171.56	286
Punjab	...	...	...	1	181	723	193	916	155	71	682.57	111.87	180
Central Provinces	...	...	...	1	74	287	73	360	44	29	284.34	16.33	94
Bombay	...	...	...	7	429	1,164	294	1,458	128	160	1,048.9	39.8	211
Madras	...	...	...	3	260	780	237	1,017	90	87	772.85	77.77	220
Burma	...	...	...	2	178	672	125	797	45	153	593.38	43.31	351
TOTAL				22	1,931	6,426	1,624	8,050	771	776	6,158.07	582.01	2,174
				22	1,804	6,090	1,551	7,641	676	548	5,981.31	516.19	2,124

112. The death rate was low and there were no epidemics; but there is overcrowding in spite of recent additions to the asylums. This must continue until the central asylum at Ranchi is built.

Bengal.

113. The sick rate and death rate were high; the latter was largely due to tuberculosis. Tubercle wards have been introduced, but there is still overcrowding.

Assam.

114. The asylum cannot accommodate the lunatics of the province, and it is reported to be defective in every respect. As far as possible it will be patched up for the period that must elapse before the Ranchi asylum is built. The death rate rose from 91·2 to 105·5 per 1,000.

Bihar and Orissa.

115. There has been a rise in the sick rate, and at Agra deaths increased from 44 to 59; the prevalence of phthisis is noticeable, but there was an improvement in the figures for dysentery. Plans for tuberculosis sheds at Agra are being considered. European accommodation is unsatisfactory, and should be improved at once.

United Provinces.

116. There was a slight decline in the sick rate, but it is still higher than it used to be. There was a small outbreak of cholera, but it accounted for 4 deaths only. Masonry floors are being introduced throughout the asylum; this, it is hoped, will reduce the sickness from tubercle and bowel trouble.

Punjab.

117. The year has been a healthy one and there was little sickness. The asylum buildings have been improved in many ways, and there is no overcrowding.

Central Provinces.

118. The general health was fairly good, but the death rate rose from 8·7 to 15·3 per cent. of the average strength. This rise was due to increased mortality from diarrhoea and dysentery at Nanpara and from tubercle in the other asylums.

Bombay.

The pay of the warder staff has been raised, with satisfactory results.

119. The number of admissions continues to increase. The health of the inmates was fair, but the death rate was higher than usual.

Madras.

120. The year was an unhealthy one and the death rate rose from 13·48 to 31·29 per cent. of average strength. Cholera accounted for 22 deaths. Schemes for improving the flooring of the Rangoon asylum are under consideration, and the system of trenching of night soil has been replaced by one of removal.

Burma.

D.—Medical Colleges.

There are now, since the opening of the King George's Medical College, Lucknow, five colleges which afford the course of instruction for University degrees, three also train military assistant surgeons. During the year the students numbered 163 civil and private male, 149 military and 99 female students, a total of 1,871.

121. The number of students on the rolls at the end of the year was 514, of whom 24 were military pupils and 29 were women.

Bombay, Grant Medical College.

The new Physiological laboratory has been taken into use.

Eighty-seven students, of whom 6 were females, obtained the L.M.S.; 36 obtained the degree of M.B. B.S., 1 the M.D. and 2 the B. Hy.

122. There were 432 students, of whom 42 were women and 41 military.

Madras.

The question of removing the college to a new site is under consideration.

Twenty students passed the L.M.S. and 14 obtained the M.B., C.M. degree. Seven women obtained the college qualification of medical practitioner.

The sanitary inspector class now has 57 students.

123. Proposals for the creation of a new college are under consideration.
Lahore.

The number of students was 141; the decline is ascribed partly to the number of rejections in the Intermediate Science examination, and partly to the increasing popularity of Science degrees. There were only 2 female students. 24 students obtained the M.B., B.S. and 5 the old L.M.S.

124. The question of providing a hostel for male students, also a materia medica museum and physical laboratory, is still under consideration. The total number of students rose to 731, of whom 23 were women and 84 military pupils. 25 students obtained the final M.B. and 19 the L.M.S.
Bengal.

The demand for admission to the college is enormously in excess of the capacity of the institution; out of 544 applicants only 153 were admitted.

125. The King George's medical college has opened its second session. There are at present 53 students, 3 of whom are women.
Lucknow.

E.—Medical Schools.

There are 14 schools which train civil, military and private pupils for the passing out diploma.

The students numbered 2,176, or 111 less than last year.

126. *Berry White School, Dibrugarh.*—The year closed with 113 students, including 5 military. 18 students passed the final medical examination, and 7 the examination for compounders.
Assam.

Two new boarding houses have been built; also a new X-ray room.

127. *Rangoon Medical School.*—There were 42 students at the end of the year. 10 passed the final examination. The school was removed to the old General Hospital building, and a hostel is now available, for 32 boarders. There is urgent need for a maternity ward for clinical study is insisted on.
Burma.

128. *Campbell School, Calcutta.*—The students number 211 males and 11 females; of these 52 men and 2 women passed the final examination for the diploma of the school, and 85 the compounder's test. The school now gives post-graduate instruction to civil Sub-Assistant Surgeons.
Bengal.

Dacca School.—There is great need for more accommodation and for hostels. The students number 192, of whom 4 are women. 29 obtained the school diploma and 84 became compounders.

129. *Agra Medical School.*—The students numbered 287, of whom 66 were women and 73 military. 29 males and 13 females passed the final examination.
United Provinces.

The accommodation is insufficient to meet the demand for admission.

130. *Lahore Medical School.*—The number of students was 349 of whom 74 are military. 32 passed the final examination, and 7 women obtained the midwife's and 42 the "dhais" certificate. The school is overcrowded and there is great lack of clinical material. The Principal again urges the necessity for its removal to another town.
Punjab.

131. *Temple School, Patna.*—The female students hostel has been completed. There were 111 male and 2 female students. Of these 10 males passed out as licensed medical practitioners, and 33 became compounders.
Bihar and Orissa.

There is not much desire to enter the service of Government.

Orissa School, Cuttack.—A new hostel is urgently required. There were 128 male and 6 female students; of these 24 male obtained the passing out diploma, and 29 became qualified compounders.

132. *Hyderabad School.*—The students number 74, and 12 passed the final examination. The financial position of the school is bad, and lack of accommodation and funds restrict its operation as a teaching institution.

Bombay

Byramjee Jejeebhoy School, Poona.—There are 135 students, including 3 women and 34 military. 26 obtained the school diploma.

Byramjee Jejeebhoy School, Ahmedabad.—There are 153 students, including 1 woman and 50 military. 21 obtained the school diploma.

133. *Medical School, Vizagapatam.*—The students number 61, of whom 2 are women. Lack of accommodation limits the usefulness of the school. 8 students obtained the diploma.

Madras.

Medical School, Royapuram.—There are 214 students of whom 79 are private paying ones, but more accommodation is urgently required. There are 40 military and 20 women pupils. 34 passed the final examination.

Medical School, Tanjore.—There are 88 students, of whom 1 is a woman and 2 are military. 15 passed the final examination.

*F.—Annual Report of the X-Ray Institute of India, Dehra Dun,
1912.*

134. Two classes of instruction have been held during the year numbering 38 students in all, including officers of both services in military employ, Assistant Surgeons and Sub-Assistant Surgeons (Civil and Military). Of this number 30 passed the prescribed examination of whom 5 obtained the special proficiency certificate, and 8 failed to pass.

The number of skiagraphic examinations made at the Institute during the year was 1,216. The number of cases sent for treatment was 85.

The new workshops and store-rooms required in connection with the Civil Repair Scheme were completed and taken over from the Public Works Department.

In addition to radiography and radio-therapy, work has been done with sinusoidal, direct, and high frequency currents, electric light baths, vibratory massage etc.

SECTION VII.

SANITARY WORKS.

135. In paragraph 123 of this report for 1911 the allotments made by the Government of India to provincial Governments during the years 1910-11 and 1911-12, for the improvement of sanitation are mentioned. For the years 1912-13 and 1913-14, the Imperial Government have assigned large grants for expenditure primarily on urban sanitary works, though it was said expenditure might be incurred on rural sanitation also, if provincial Governments were satisfied, in the first instance, that practical schemes were available. The grants made to the several provincial Governments, non-recurring and recurring, respectively, are:—Madras 27 and 6 lakhs; Bombay 27 and 6 lakhs; Bengal 20 and 5 lakhs; the United Provinces $27\frac{1}{2}$ and 6 lakhs; the Punjab $14\frac{1}{2}$ and 4 lakhs; Burma $10\frac{1}{2}$ and 3 lakhs; Bihar and Orissa 10 and 3 lakhs; the Central Provinces $10\frac{1}{2}$ and 3 lakhs; Assam 3 and $\frac{1}{2}$ lakhs. The non-recurring allotment of 27 lakhs to Bombay includes half-a-lakh for improving and refitting the Bombay Bacteriological Laboratory at Parel, Bombay; the allotments of $27\frac{1}{2}$, $14\frac{1}{2}$ and $10\frac{1}{2}$ lakhs, respectively, to the United Provinces, the Punjab and Burma, include half a lakh each for improving the vaccine depôt in each of those provinces, and the allotment of $10\frac{1}{2}$ lakhs to the Central Provinces includes half a lakh for the establishment of a central vaccine depôt in the province. Recurring grants of half-a-lakh each have been made for expenditure on sanitary works in Delhi, the North-West Frontier Province and Bangalore. These grants are also primarily for urban sanitation, but a portion may be spent on suitable rural schemes. It may be mentioned that along with these grants the Imperial Government also sanctioned a recurring grant of 5 lakhs for the Indian Research Fund.

In connection with the grants to local Governments it has been requested that some account of the works or objects on which the grants are expended may be given in the provincial sanitary reports.

The following paragraphs contain information, called from the reports of provincial Sanitary Commissioners, Sanitary Engineers and Sanitary Boards in regard to the work carried out or in progress in their respective provinces during the year.

136. During the year 1911-12, the total income of the 111 municipalities in the province, excluding Calcutta, (the number has decreased from 130 owing to the reconstitution of the province on the 1st April 1912) was, including the opening balance, Rs. 78,08,730 against Rs. 75,31,496 the year before: the increased income was derived from municipal rates and taxes. Of the total income, 36·15 per cent. was spent on sanitary works, original and recurring, against 35·08 in the previous year; 7·82 per cent. on roads against 7·69; 4·36 per cent. on public safety against 4·35; and 28·21 per cent. on all other requirements against 33·57. The total expenditure on sanitary works during 1911-12, was Rs. 34,33,598 as compared with Rs. 32,20,960 during the previous year. There was increased expenditure under six of the eight sub-heads, the largest increase being Rs. 1,01,631 on conservancy and Rs. 1,76,994 on water supplies:

the decreased expenditure occurred under drainage (Rs. 66,779) and treatment of sick (Rs. 84,761). The increase under water supplies was shared by all Divisions, and under conservancy by three. The decrease under drainage is explained by expenditure in the previous year on large schemes in four towns. The local Government remarks that the increased expenditure indicates greater activity on the part of municipalities and a greater realization of their responsibilities. Progress, however, is slow, much time being lost by municipalities in the consideration of projects prepared by the Sanitary Engineer, while applications for Government loans to finance schemes are, as a rule, so imperfectly prepared in the first instance, that considerable delay is inevitable.

During the year the total cost of the sanitary works executed by Government, Municipalities, District Boards and private individuals, was Rs. 12,30,769. The largest item was the construction of the Barisal water works (Rs. 1,19,470), followed by works in connection with the Darjeeling sewage scheme and ropeway (Rs. 92,411); works in connection with the Jessore water works scheme (Rs. 63,186); new water supply scheme, Kurseong (Rs. 54,588); works in connection with the Hooghly-Chinsura water supply (Rs. 51,108). There were other works costing less than half-a-lakh each.

During 1912-13, grants amounting to Rs. 7½ lakhs were provided for sanitary improvements, but advantage was not taken of the full amount, Rs. 5,41,388 only having been allotted, and nearly half this amount, Rs. 2,50,000, was for one scheme—the extension of the Howrah water works.

The septic tank installations gave excellent results during the year, and in very few instances was it necessary to call the attention of mill managers to defects. Several new tanks were constructed during the year, thus doing away with the old and objectionable hand removal latrines.

Action is being taken to give effect to the scheme for the appointment of health officers and trained sanitary inspectors in municipalities. A class to train 30 students each year as sanitary inspectors was opened at Calcutta in February 1913, and it is hoped that much needed improvement in the conservancy and sanitation of municipal areas will result from the entertainment of qualified men.

137. The Board held three regular meetings during the year: an extraordinary meeting was also held in conference with the Malaria Committee of Bengal to consider the question of joint action in regard to the special Public Works division for investigating drainage schemes for malarious areas. Among the more important questions discussed at the ordinary meetings were rules for the duties of the Board and the Sanitary Engineer and the status of the latter, and an arrangement by which an annual programme of sanitary engineering works to be carried out is to be drawn up by the Sanitary Engineer.

The year was one of great activity in the Sanitary Engineer's office and more work was done than in any previous year. The necessity for the services of a second Assistant Sanitary Engineer has been recognised by the creation of such an appointment. The progress of constructional work was again slower than could be desired, but is attributed to the laxity of contractors, who allege the difficulty of obtaining materials.

For water supply schemes, sketch projects were under preparation by the Sanitary Engineer for nine towns, the more important of which were Narainganj (estimated cost Rs. 1,38,515), Bhatpara (Rs. 4,85,000), Utterpara (Rs. 1,17,000) and Chandpur (Rs. 1,11,900). The only sketch project for a water supply in Bengal prepared outside the Sanitary Engineer's office was for Chittagong. Detailed schemes were prepared for four towns. Of 11 water-works under construction those at Chandpur were completed during the year, those at Khulna practically so, and those at Barisal were partially completed and formally opened. The improvement of the existing water supplies at Mymensingh, Dacca and Berhampore were under consideration.

It is estimated that from the water works of Bengal (excluding Calcutta) 683,279 persons received a daily average of about 6,120,746 gallons of water, at actual costs varying from '44 annas per 1,000 gallons at Darjeeling to 4'8 annas per 1,000 gallons at Khulna. Periodical analyses were made of the water supplied, the results of which were generally good at Dacca, Howrah and Burdwan; not always satisfactory at Darjeeling, Kurseong and Berhampore; while at Khulna, Chandpur, Narainganj, Mymensingh and Barisal the water was of indifferent quality: the improvement of the quality at the last mentioned places is, however, mainly a question of the expenditure of money.

Sewerage schemes were prepared for three towns, one of them, for Dacca, by a firm of civil engineers, and good progress was made with the sewerage of Darjeeling. Sketch drainage projects were in course of preparation for 15 towns, and detailed projects prepared for five. The detailed scheme for the central drainage canal of the Howrah municipality, at a total estimated cost of Rs. 6,47,732, was completed and submitted to Government for sanction. Drainage works were under construction in nine towns. The total capital expenditure on drainage works in municipalities in the province up to the 31st December 1912 was Rs. 12,88,777 of which Rs. 1,34,828 was expended during 1912.

Three B. E. students from the Sibpur College completed their course of training under the Sanitary Engineer and two of them obtained temporary appointments on his staff. Three other students from the College have been placed for a year's training.

138. Owing to the reconstitution of Bengal, the province of Assam, shown in last year's report combined with Eastern Bengal, again stands separate. In the province are 11 municipalities, four unions and one station. During the year 1912, the income of the municipalities was Rs. 6,60,258, against 3,94,298 the year before, of which the average percentage spent on sanitation and sanitary works, was 57'4 and 44'4, respectively. The large increase in income was mainly due to grants-in-aid from Government. The increased expenditure on sanitary works from Rs. 2,25,680 in 1911 to Rs. 4,43,907 in 1912 was represented under all the principal heads, but the only large increase was under "water supply", Rs. 1,95,880, due to the construction of the works at Jorhat and Shillong.

Among the principal schemes under preparation or projected are water works for Silchar to cost Rs. 1,16,658; and Jorhat; Rs. 1,16,316; these have been sanctioned by Government; improvement of the Dhubri water supply; renovation and improvement of the Gauhati and Golaghat water works. The new water works at Shillong were completed during the year at a total cost of Rs. 81,290; a regular analysis of the water is carried out which shows the supply to be of exceptional purity.

Among conservancy and drainage schemes, the conservancy system of Silchar is under revision, and a scheme for the thorough revision of the system at Sylhet has been drawn up and submitted to Government for approval. At Shillong an experimental septic tank installation has been erected, and, if successful, will be extended.

Under village sanitation, the five years' programme of work for the improvement of rural water supply, at a total cost of Rs. 1,50,000, in the Gauhati sub-division is approaching completion; a similar scheme for the Barpeta sub-division, to cost Rs. 65,175, is being carried out, and another for the Mangaldai sub-division, to cost Rs. 75,000 has been sanctioned. An important step taken by the local Administration is the allotment of two lakhs of rupees to Local Boards for expenditure on rural water supply during 1913-14. Every Board is required to prepare a comprehensive programme of the work of this nature which can be undertaken with financial assistance from Government during the five years commencing with 1914-15.

139. During the year a Sanitary Board was constituted composed of the Inspector-General of Civil Hospitals, as President, the Chief Engineer and Divisional Commissioners, as members, and the Deputy Sanitary Commissioner as Secretary. Two meetings were held during the year. The only executive function of the Board is the distribution of grants placed at its disposal for rural water supplies. The Board drew up proposals for the creation of a cadre of sanitary inspectors, which were accepted by Government, and arrangements are being made for the recruitment and training of candidates.

Great delay was experienced in the preparation of schemes owing to the absence of a Sanitary Engineer. This want has now been met by the creation of such an appointment.

140. The year 1912-13 is the first for which a report of the sanitary works in the newly constituted province is given, and comparison with previous years is therefore not possible. There are 54 municipalities in the province and during the year a sum of Rs. 8,29,345 was spent by them on sanitation: more than half, Rs. 4,96,957, was under the head "conservancy", and sums of Rs. 1,67,722 and 1,20,831 under "water supply" and "drainage", respectively. The most important sanitary works involving capital expenditure in municipalities relate to water supply and drainage. Among the most important water works are those of Gaya, estimated to cost Rs. 6,30,000, which were approaching completion at the end of the year, and Monghyr, estimated to cost Rs. 3,47,000, which were practically complete. A rough project of the Puri water supply scheme at an estimated cost of Rs. 4,25,000 has been drawn up, but cannot be taken up for want of funds: schemes for the water supply of Patna and Bankipore are under preparation and one for Muzaffarpur under consideration.

Of drainage schemes, that of Gaya is estimated to cost Rs. 6,80,000, but cannot be completed for some time. An interesting feature of the scheme is the principle of allowing the effluent from each public latrine and conservancy dumping station to remain under treatment in a septic tank before it passes into the sewer. The drainage project of Puri is under construction and is estimated to cost, when complete, Rs. 2,30,000. The surface drainage scheme of Monghyr, estimated to cost Rs. 2,22,000, is in progress. Drainage schemes for Patna and Bankipore are under preparation and one for Muzaffarpur under consideration.

In regard to the conservancy arrangements of the municipalities, the provincial Sanitary Commissioner remarks that they are not satisfactory, scarcely one of the larger towns possessing either sufficient staff or adequate appliances. Large expenditure to make good deficiencies will be necessary.

Out of the Imperial grant-in-aid of Rs. 6,62,000 for sanitation, Rs. 2,47,049 was allotted during the year, Rs. 1,00,000 of which was towards the Gaya water supply and drainage schemes. A large proportion of the remaining allotments was for surveys and the preparation of projects.

The expenditure of District Boards on sanitation amounted to Rs. 2,19,532. With regard to expenditure on the improvement of rural water supplies, the Bengal system is in force, under which each Board is expected to spend a minimum of Rs. 5,000 a year and the local Government undertakes the refund of one-third of the expenditure up to Rs. 3,000. The matter though of importance, does not appear to receive the attention it deserves. Village sanitation is said not to be neglected, but the means are infinitesimal in comparison with the work to be done.

141. A Sanitary Board was constituted in August 1912. Only one meeting was held during the year, the bulk of the work being carried out by the circulation of files. A Sanitary Engineer joined the province in the preceding April.

Only two water supply projects were under construction during the year—those at Monghyr and Gaya already mentioned—and nine others were under consideration. The scheme for a water supply for Balasore has been abandoned as it was found impossible to finance it. There were 11 drainage schemes in course of preparation during the year, the chief of which were for the surface drainage of Buxar, at an estimated cost of Rs. 1,28,008; Kendrapara Rs. 1,25,134; Bihar Rs. 1,36,355. Plans and estimates were framed for drainage schemes for Ranchi, Chapra, Purulia, Bettiah and Chatra, but have been abandoned owing to the inability of the municipalities concerned to carry them out.

During the year contracts were let and work was in progress on two water supply and six drainage schemes, and a third water supply scheme is ready. The total value of these works amounts to Rs. 20,28,718.

142. During the year 1911-12, the total municipal income amounted to Rs. 90,10,297 as compared with Rs. 73,23,645 in 1910-11, and the expenditure on conservancy, water supply and drainage was Rs. 32,14,112 or 36 per cent. of income, against Rs. 28,81,297 or 39 per cent. the year before. In towns and villages where the Village Sanitation Act is in force, Rs. 1,35,278 was spent on sanitary improvements against Rs. 38,940 in 1910-11. With a view to encourage village sanitation by the villagers themselves, certain districts were selected by Government and in these committees of villagers or village punchayets, selected or approved by District Boards, are to be entrusted with funds to be spent within village areas. The Government grant is to be equal, within fixed limits, to that contributed by the District Board concerned.

Activity in sanitary matters was a prominent feature of the year, and this is largely due to generous grants and loans for sanitary purposes given by the Imperial and Provincial Governments and the relief of towns from police charges. Another

factor is the greater interest that is being evinced by enlightened members of the Indian community in matters pertaining to sanitation as conducing to better health and greater comfort.

During the year, seven sanitary schemes were finally sanctioned; the chief of these being the Aligarh drainage scheme (cost Rs. 6,30,414), the Bahraich drainage scheme (Rs. 3,50,347) and the Landour drainage scheme (Rs. 2,22,564); eleven schemes were prepared by the Sanitary Engineer and forwarded to the municipalities concerned though not finally sanctioned, among which were the Allahabad water supply improvements (cost Rs. 3,37,371); Muttra drainage (Rs. 2,99,368); and Agra water supply extensions (Rs. 1,12,000): seven schemes were practically completed, though not finally disposed of, the two chief ones being the Etawah drainage, revised scheme (cost Rs. 3,69,000) and Brindaban drainage (Rs. 2,27,000); nine large schemes were begun and are under preparation.

The eight large water works on the whole gave satisfactory results, the only serious breakdown occurred at Allahabad. The demand is everywhere in excess of the supply, but a high standard of purity was maintained at all stations. It is estimated that the total cost of these water works amounts roughly to Rs. 125 lakhs and when improvements and extensions are complete, the cost will be nearly $1\frac{1}{2}$ crores of rupees. Proposals are under consideration for utilizing tube wells at certain places: arrangements have been made for boring tools and pipes and for a staff of borers and an early commencement of work is anticipated.

The Sanitary Engineer's report affords information concerning the many schemes in hand and contemplated, which need not be summarised here, and indicates the active policy in regard to sanitary works in the province. Briefly, the projects in hand and under investigation at present amount in value to a total of 73 lakhs: those urgently needed, but not yet taken up, amount to 27 lakhs; others less urgent and deferred till the more urgent ones are disposed of, amount to over 50 lakhs.

143. The Board held eight meetings during 1912. The amount for sanitary improvements at the disposal of the Board during the year was Rs. 5,16,130, and of this Rs. 4,59,704 was allotted. During 1912-13, the Imperial grant for sanitation was Rs. 8,00,000 and this was distributed between nine schemes, Rs. 3,000 being held in reserve, *viz.*, Muttra drainage (Rs. 2,00,000), Fyzabad-Fatehganj drainage (Rs. 1,12,000), Agra improvement of drainage (Rs. 1,00,000), Cawnpore extension of drainage and paving (Rs. 58,000), Ballia, Jaunpur, Saharanpur and Etawah drainage (Rs. 50,000 to each), Kheri-Lakhimpur drainage (Rs. 27,000) and extensions to the Agra water works (Rs. 1,00,000). In addition special grants were sanctioned for the Agra balancing tank works (Rs. 60,000), Landour drainage works (Rs. 25,000) and construction of a road, sewer and storm water drain in Benares (Rs. 15,000), total Rs. 1,00,000. Of the schemes considered by the Board, administrative sanction was accorded to two for water works, eight for drainage and sewerage, and four "other works", of the aggregate estimated cost of Rs. 18,99,767. Proposals for other schemes were received by the Board, but were either returned for further particulars or deferred owing to the inability of the municipalities concerned to finance them. Other important matters were considered, among them revised rules for the functions and working of the Board; the question of town planning,

on which it was decided all schemes of town extension should be classed as sanitary projects to be approved by the Board ; the appointment of health officers for municipalities with incomes of less than Rs. 50,000 a year.

144. The provincial sanitary report does not contain information of the income of, and expenditure on sanitation, by municipalities. The liberal grants made by the Government of India will enable the local Government to spend about 33 lakhs on sanitary works during the next three years, so that the province has before it a period of great sanitary activity. Works of public utility were carried out by private individuals in several districts, but were much more in evidence in the Ambala and Jullundur divisions than elsewhere. The system of rewards for improved sanitation in villages has not been a success ; the special rewards for sanitation in the Chenab colony have been discontinued.

Among the principal sanitary works in the province is the Chair water supply extension at Simla, which will provide an extra supply of some 300,000 gallons a day. The pumps for the scheme are to be worked by electric energy. The revised estimate for the scheme amounts to Rs. 5,75,587. The extension of the sewage mains in Simla, estimated to cost Rs. 61,000, is under execution. At Amritsar an estimate for Rs. 45,040 for sinking perforated tubes in all the water supply wells was sanctioned. Sanction was also accorded to a detailed scheme for the underground drainage of a part of the city, to cost Rs. 2,20,000. The work of filling the "Dhabs" at Amritsar, to cost Rs. 1,50,000, sanctioned in 1911, made good progress. The sinking of 11 additional wells for the Lahore water supply head-works was practically completed, while the sanitary fittings, water supply and sewage disposal works for Queen Mary's College were completed at a cost of Rs. 85,186. An underground drainage system for a part of Lahore city, to cost Rs. 71,431, has been sanctioned. Other works included improvements to the water supplies of Ambala, Lyallpur and Khusab, and completion of the water supply for new Dera Ghazi Khan. The extension of the drainage in Lyallpur, and the construction of the drainage works in Karnal were completed, and some progress was made with the drainage scheme of Fazilka.

During the year 15 estimates, aggregating Rs. 6,60,000, were sanctioned in addition to that of the Simla water works extension already referred to. The Sanitary Engineer scrutinized and approved 25 estimates, the total value of which amounted to Rs. 13,92,000. In addition 12 detailed estimates were prepared or recast by the Sanitary Engineer, of the value of Rs. 2,90,000, and four rough estimates of the value of Rs. 16,00,000 were prepared for administrative sanction. Reference is made to a note prepared by the Sanitary Engineer for the guidance of those desirous of having sanitary schemes prepared, and to a pamphlet for the guidance of those engaged in the preparation of surface drainage projects in the Punjab. Both have proved useful and have been in great demand.

145. The constitution of the Sanitary Board was the same as in the preceding year. Four meetings were held. During 1911-12 the Board distributed to municipalities and District Boards, all but nine annas of the grant of Rs. 1,50,000 placed at its disposal, of which the largest grant was of Rs. 40,000 to Lahore for sinking 11 additional wells. Of the similar grant for 1912-13, the Board had allotted Rs. 66,259 up to the end of December 1912, the largest sum being Rs. 39,000 for the Chiniot drainage scheme. The Board considered, and after approval, submitted for

administrative sanction, 15 schemes, the more noticeable of which were, Sialkot water supply (Rs. 4,27,288) ; Amritsar sewerage (Rs. 2,20,520) ; Rawalpindi intramural drainage (Rs. 1,69,398) ; filling of " Dhabs " at Amritsar (Rs. 1,49,997).

146. No sanitary work of capital importance was carried out in the province during the year. Municipalities spent on sanitation a sum of Rs. 1,14,977, the four largest of these bodies incurring expenditure, chiefly on water supply, drainage and paving. Of the Government grant-in-aid for sanitary works in 1911, Rs. 63,483 remained unexpended. The grant of Rs. 1,25,000 made in 1912 was allotted between the Peshawar city improvement scheme (Rs. 1,06,000), and on sanitary improvements in the Khyber Militia posts. The former includes several much needed improvements.

147. The provincial sanitary report does not afford information as to the income of municipalities and the expenditure on sanitary works. The local Administration notes that for 1912-13 a sum of Rs. 7,17,000 was provided in the provincial estimates for grants to municipalities for works of sanitary improvement. The largest grants made during the year were of Rs. 1,00,000 and Rs. 78,000, respectively, for the drainage schemes under construction in Nagpur and Wardha. Of the total assignment, Rs. 3,12,032 lapsed, but none the less it is said the progress made during the year has not been unsatisfactory. The extreme urgency of the demand for water supply has led to the temporary postponement of drainage schemes, and while some water supply projects are set down for early construction, the only drainage schemes likely to be proceeded with in the near future are those for Jubbulpore, and possibly, Harda.

The following information in regard to water and drainage works under construction or investigation, has been taken from the report of the provincial Sanitary Engineer.

Nagpur water works.—All the principal works had been completed before the end of 1911, and during 1912 certain subsidiary works were carried out. The catchment area of the Gorewara storage lake was finally cleared of habitations and the fencing completed.

Hinganghat water works.—A scheme to improve the yield of the well from which the town water supply is drawn, estimated to cost Rs. 22,887, was taken in hand.

Raipur water works.—The extension of the infiltration gallery at the head-works to improve the filtered supply, to cost Rs. 45,832, has been sanctioned.

Improvements were made to, or estimates prepared to improve, the water supplies at *Khandwa, Burhanpur, Amraoti town, Amraoti camp and Wadali.*

In regard to water supply schemes under investigation, or for which projects have been prepared, are—a project for Arvi town to cost Rs. 4,60,000: a project for providing Amraoti with an adequate and reliable water supply, estimated to cost nearly Rs. 9,00,000, which for the present is considered prohibitive in cost: re-casting of the Wardha water supply, estimated cost Rs. 3,50,000: supplementary water supply schemes for Akola, Khandwa and Burhanpur: a new scheme for Buldana; and preliminary investigation of supplies to 7 towns.

The drainage schemes under construction are those at Nagpur, estimated cost Rs. 16,00,000, of which Rs. 3,00,000 had been allotted and Rs. 1,74,419 spent up to the end of 1912 : Wardha surface drainage scheme, estimated cost Rs. 1,93,000, of which Rs. 1,28,000 has been allotted and Rs. 47,153 spent. The Khamgaon surface drainage, estimated cost Rs. 2,79,976, which has been reduced to Rs. 2,19,000 by omitting septic tank latrines, has been sanctioned, and work is to commence as soon as arrangements are completed. Several drainage schemes are under contemplation, but as already mentioned, only two are likely to be proceeded with in the near future.

148. A Sanitary Board has been constituted for the province, and is said to have done useful work in connection with sanitary schemes and methods of financing them. The Board has also prepared a useful programme of works to be undertaken in the immediate future.

149. The number of municipalities in the presidency remained unaltered during 1912. Their expenditure on sanitation amounted to Rs. 16,33,189, or 67·7 per cent., of the total assignment, as compared with Rs. 14,68,751, or 62·2 per cent. in 1911, and was devoted to the improvement of town sites, water supply, conservancy, sanitary arrangements at fairs and festivals, on markets, slaughter-houses, latrines, drains, etc. The provincial Sanitary Commissioner considers that a steady advance has been made in sanitary progress during the year, but that in view of the improved financial position, redoubled efforts should be made to improve the sanitation of both rural and urban areas to retain the forward position claimed for the presidency.

The addition of Periyakulam and Vizianagram to the list of towns provided with a piped water supply, has raised the number of such towns from 19 to 21. Although more than two-thirds of the municipal towns are not yet in possession of a satisfactory drinking water supply, it is claimed that this is not due to indifference or apathy, as several municipal councils have accepted schemes which are either under execution or investigation, and others are discussing ways and means of financing them. In regard to drainage schemes, there was no advance on the previous year. Ootacamund is still the only *mufassil* municipal town with a sewerage scheme in working order, but schemes are under investigation for no less than 28 towns, with, in addition, improvements to the Ootacamund scheme.

In connection with improvement schemes by municipalities with the aid of provincial funds, it is said that progress is hindered by the absence of competent public works officers to draw up plans and estimates and to supervise the execution of works ; proposals to secure that every municipality should employ a duly qualified officer capable of undertaking such work are under consideration.

Sewage farming was in force in 21 municipalities, the method employed usually consisting of the application of crude sewage to land by broad irrigation. The crops grown consist of English and country vegetables, various kinds of grasses, tobacco, plantain, sugarcane, cocoanut, etc., and reports show these thrive on sewage irrigation. Financially, however, sewage farming is a failure, but the results in Vizagapatam and Tanjore afford evidence that with care and attention such farms could be worked on more profitable lines than at present.

For all District Boards the assignment for sanitation amounted to 8·2 per cent. of the estimated income against 9 per cent. in the preceding year. The expenditure, however, was only 45·2 per cent. of the allotment, against 42·6 per cent. the year before, so that a large proportion of the provision was not utilized. Of the total allotment of Rs. 12,89,652, a sum of Rs. 1,10,679 was spent on water supply and Rs. 3,52,025 on conservancy. There was no appreciable advance in regard to the condition of water supply, drainage and conservancy in rural areas. The chief need in rural areas is a fairly pure water supply and attention to conservancy. At present nowhere in rural areas is there a piped water supply or comprehensive sewerage system.

In regard to sanitary works in the presidency, the report of the Sanitary Engineer, which now refers to the financial year, shows that during 1912-13 investigations were completed for 7 water supply and 8 drainage schemes, and others were on hand. Water supply schemes for 6 towns were under execution by the Public Works Department, the largest of these being for Negapatam, to cost Rs. 8,39,390, and four under execution by the Sanitary Engineer. During the year the Sanitary Engineer drew up 8 type designs and scrutinized 514 proposals for minor sanitary works of the value of Rs. 17,50,754. The growth of work of this description is attributed to the financial assistance given to local bodies and to the increased interest shown by them in the improvement of sanitation.

150. There was no change in the constitution and functions of the Sanitary Board during the year, the latter being advisory.
 Sanitary Board. After prolonged consideration, the type designs (18 in all) for the component buildings of a *moffasil* General Hospital, admitting of adaptation for expansion or curtailment, were completed during the year. Standard designs were issued for (1) simple sanitary measures for conserving village tank water supply; (2) a 12-bed main ward for small hospitals; (3) scour pipe for water works; (4) well water supply arrangements. During the year the Board approved of 54 schemes of the estimated cost of Rs. 35,19,576. Of these 32 schemes, estimated to cost Rs. 30,05,372, were for municipalities, and 22 schemes, estimated to cost Rs. 5,14,204, related to Local Fund Boards. Of the total, 39 of the schemes, cost Rs. 1,84,113, were within the Board's powers of final approval; 5 of them, aggregating Rs. 26,035 are reported to have been completed, and 15, estimated cost, Rs. 79,289 were under execution at the close of the year. Among the works approved by the Board the largest were, Vellore drainage scheme (estimated cost Rs. 4,07,970), Madura drainage scheme (Rs. 22,00,000), Saidapet water supply (Rs. 1,89,100), Rameswaram water supply (Rs. 1,25,500) and Gudur water supply (Rs. 1,12,800).

151. During 1912-13, the number of city and town municipalities was 157, as in 1911-12. The total income of these bodies was Rs. 1,16,36,120 as compared with Rs. 97,16,431, the year before, and the expenditure on public health improvements was Rs. 32,15,212 against Rs. 25,70,603. Under the stimulus of Government grants, closer attention is paid to sanitation and many improvements in water supply and drainage are being carried out.
 Bombay.

During the year 1912 the local Government sanctioned certain allotments from provincial funds, in addition to the Imperial allotment of 7 lakhs of rupees for sanitation. The provincial grants were for carrying out improvements

to village water supplies, and those from Imperial revenues were mainly devoted to the improvement of water supplies, village sanitation, the proper equipment and maintenance of dispensaries, and the up-keep of roads and bridges. During the year, 11 new projects were sanctioned and 35 works were either in progress or under investigation. Of the total of Rs. 8,60,828 sanctioned during 1912 for sanitary works, the chief allotments were on account of the Poona city drainage and water supply, Rs. 3,00,000; Bijapur water works, Rs. 1,92,000; Lonavla water supply, Rs. 1,60,000; Surat town, Broach city and Sholapur city improvement schemes, Rs. 50,000, Rs. 35,000 and Rs. 25,000, respectively.

District Local Boards and Taluka Local Boards.—Of these there were 25 and 212, respectively, with a total income of Rs. 71,77,472 during 1911-12, against Rs. 68,32,040 the year before. Of the total income, Rs. 3,90,379, against Rs. 3,52,902 was spent on water supplies and drainage, and Rs. 14,496, against Rs. 24,640, on other works of improvement.

During the year complete sanitary surveys on a uniform plan were made of 55 towns and villages as compared with 52 in the previous year, thus adding to the valuable information now available showing the sanitary defects in the places surveyed.

152. The Board held three meetings during the year. Among other matters considered were schemes for the water supplies of
 Sanitary Board. Belgaum, Hubli, (3rd stage), Matheran, Godhra, Nandurbar, further improvements to the Sholapur water supply, and the sewerage of Dhulia. The question of the appointment of a Mechanical Engineer to Government to inspect pumping installations was decided. Of the 11 projects sanctioned by the Board during the year, the chief were the Igatpuri water supply (Rs. 1,12,473); Sangli water supply (revised estimate Rs. 2,60,927); Lonavla and Khandala water supply (Rs. 3,67,801), Karad water supply (Rs. 1,81,039); Bijapur water supply (revised estimate 6,18,245).

In regard to water works in progress during the year, the following is culled from the detailed remarks on each.

Sangli water supply.—The work was practically completed, but a further revision was found necessary owing to heavy expenditure on the filtration gallery in the river bed, pump well, engine and boiler-house, steel-tower tank, etc., and the revised estimate is Rs. 3,02,426 approximately.

Hubli water supply.—The works for increasing the storage capacity of the Unkal tank, filtration works and new service reservoir at a higher level were completed, but owing to the tank running dry, the municipality put up a boring plant to supplement the supply. Work to a depth of 216 feet has not yet struck any artesian supply. A project for a supplementary tank on a better site than that sanctioned, is under preparation.

Bijapur water supply.—Rs. 2,45,401 was spent during the year: all the head-works were completed, except for the erection of the pumping machinery, engine and boiler-house: the former is awaited. The work of the raising main is in progress.

Surat water works.—The temporary bund across the river Tapti to keep out tidal water, proved unsatisfactory and the municipality are seeking advice from the Board in the matter.

Among drainage schemes may be mentioned the Poona city drainage, of which the main sewers up to 23,128 feet, out of the estimated length of 33,130 feet, have been constructed, and of the branch sewers 24,923 feet have been constructed of the estimated total of 147,947 feet. The work so far has been of the deepest and most difficult part, mostly in very hard rock. The balancing tank of the Ahmedabad drainage has been further improved by the introduction of two sluice valves to the suction pipe and an additional screen in the silt chamber. The extension of the drainage to the northern portion of the town, at a cost of 6 lakhs, is under contemplation. Surveys for an underground drainage scheme for Hyderabad have been carried out.

During the year three steam and three hand-power Calyx Drills were at work for investigating water supplies. Much difficulty was experienced in sinking the deep bore holes, but the services of an expert Boring Engineer have been secured and, it is considered, work should now progress more satisfactorily.

Experiments in sewage installation were carried out at Poona by Major F. H. G. Hutchinson, I.M.S., and a report on the subject was laid before the Board.

The Agricultural Engineer inspected the pumping installations, and in November 1912 the newly appointed Mechanical Engineer to Government took over his duties.

153. Out of a total income of Rs. 1,68,00,000, a sum of Rs. 45,00,000 was spent by the various municipal and local funds on civil sanitary works during 1911-12 : of this 14 lakhs were spent on water supply, 6½ lakhs on drainage and 13½ lakhs on conservancy. The proportion of income spent on sanitation from municipal funds during the year was 37·49 against 38·83 per cent. in the preceding year, from Town and District Funds 32·25 against 25·85, and from District Cess Funds 5·77 against 4·19.

Burma.

Of the 7 lakhs of rupees granted by the Government of India to the provincial Government during 1911-12 for the improvement of sanitation, 1½ lakhs was assigned for the rebuilding of the Pegu bazaar on improved sanitary lines, 1 lakh for the water supply scheme of that town, and 4½ lakhs for the Mandalay drainage scheme. Of the 6 lakhs granted by the Imperial Government during 1912-13, 2 lakhs were allotted for the establishment of a bacteriological institute in Burma, 2 lakhs for completing the Pegu water supply scheme, half a lakh for a new bazaar at Paungde, and 1½ lakhs for rebuilding the bazaar at Toungoo.

The report of the Sanitary Engineer for 1912 shows that projects for seven water supply schemes were drawn up during the year. Of these the scheme for Pegu, estimated to cost Rs. 3,16,833, was returned for further revision : the Mandalay scheme, to cost Rs. 12,94,833, is in abeyance owing to difficulty in financing it : the scheme for Bassein has been held up pending experiments to devise means for utilizing as a source of supply the water soaking away from leakage in the reservoir which has been completed : the scheme for Monywa, to cost Rs. 1,10,732, has been sanctioned. Drainage projects were prepared for 11 towns—for two of them (Akyab and Myaungmya) in two sections. The more important of these were, Toungoo, to cost Rs. 1,51,034, Henzada, cost Rs. 5,75,000 and Thongwa, cost Rs. 1,20,000. The Sanitary Engineer examined and reported on certain schemes and carried out experimental tube well borings at three places.

154. In June 1912, the provincial Sanitary Board was replaced by Divisional Sanitary Boards. The Divisional Boards met once at Mandalay, twice at Moulmein and once at Syriam.

Sanitary Board.

At these meetings questions concerning local sanitary matters were considered.

155. During the year 1912-13, the expenditure on ordinary military works was Rs. 86,17,716, as compared with Rs. 87,04,100 during 1911-12, and on special demands of military works, Rs. 31,98,947, as compared with Rs. 33,76,641.

Military Works.

Particulars regarding new works and improvements in some of the more unhealthy stations will be found in Tables IV and XVI appended to this report.

SECTION VIII.

GENERAL REMARKS.

156. *The Central Research Institute, Kasauli*, satisfactorily met the expanding demands for curative sera and vaccines, all of which, with the exception of antitetanic and antistreptococcus sera, are prepared in the laboratory. Both Government and private institutions are supplied. The amount of each serum and vaccine prepared at the Institute, and issued during 1911 and 1912, is tabulated below.

	1912	1911.
1. Antivenomous serum	46,680cc	30,600cc
2. Antidiphtheritic serum	12,000cc	9,480cc
3. Antidysenteric	1,660cc	2,040cc
4. Normal horse serum	40cc	1,900cc
5. Tubercle vaccine	2,534cc	1,334cc
6. Typhoid vaccine	2,849cc	14,288cc
7. Staphylococcus vaccine	433cc	425cc
8. Gonococcus vaccine	389cc	200cc
9. Acne vaccine	68cc	106cc
10. Mixed acne and staphylococcus vaccine	47cc	...
11. Miscellaneous vaccines	599cc	265c
12. Von Pirquet's cutaneous test (solutions A and B) ...	1,013 tubes	1,041 tubes

Pathological and other specimens examined during the year also show an increase in numbers and evidence the increasing usefulness of the Institute from this point of view. They include—histological examination of tumours, etc., 52; examination of blood specimens for either malaria, opsonic index, Widal's reaction or Wasserman's reaction, 719; examination of material for preparation of autogenous vaccines, 38; water samples for bacteriological examination, 8.

One of the most useful sides of the work of this Institute is the one devoted to teaching. Five classes of instruction in clinical bacteriology and technique were held during the year. Each course lasts one month. Twenty-two Indian Medical Service officers and thirteen military assistant surgeons availed themselves of these classes in 1912.

Two classes of instruction in malaria were held by the Central Malaria Bureau of the Institute during 1912, one in Amritsar, the second in Delhi. Each course lasted a month and a half, and were attended by a total of 12 Indian Medical Service and 9 Royal Army Medical Corps officers, and 36 other Medical Officers and Subordinates. In addition to teaching, the Malaria Bureau has been engaged in completing its type collection of all known Indian anophelines, and in making as many duplicate sets as possible for the use of students working at the Bureau, as well as for institutions and colleges both in India and abroad. Specimens of anophelines and culicines are sent to the Bureau in large numbers for identification. Attention has also been paid to collecting and studying varieties of fish that are known feeders on mosquito larvæ.

The Bombay Bacteriological Laboratory, Parel, Bombay, still serves its dual function of plague laboratory for all India and the provincial bacteriological laboratory. It is the former which absorbs most of its energies. Though the demands for anti-plague vaccine were considerably less than in the record year 1911 when 1,211,170 doses were sent out, the output for 1912 is represented by the high figure of 727,377 doses. The decrease was coincident with the still more marked decline in plague incidence that 1912 exhibited, as compared with the previous year and is doubtless chiefly explained by it. Since this laboratory was opened in 1895, ten and a half million doses of anti-plague vaccine have been manufactured and distributed by it.

The Director's report for 1912 contains numerous statistics collected during the year bearing on the subject of the efficiency of the vaccine as a plague prophylactic. Some of these have been compiled with great care and show that inoculated persons are more than three times less likely to become infected with plague than the uninoculated, and that if infected, they run a two-fold better chance of surviving the attack than if they had not submitted themselves to inoculation. Once again no untoward results were recorded as the result of inoculation.

Research work in connection with plague carried out during the year dealt with the efficacy of some common rat poisons, and experiments with hydrocyanic acid gas as a disinfecting agent on a large scale for the purpose of destroying rats and fleas in cargo, especially grain. These latter experiments have not yet been completed.

The Plague Research Commission have their head-quarters in the Laboratory. The Advisory Committee, under whose auspices the Commission work, have issued their seventh report on plague investigation in India. The report consists of sixteen papers which cover a wide range of subjects directly or indirectly bearing on the etiology and prevention of plague. The immunity to plague that the City of Madras has enjoyed is the subject of the first paper. No very definite conclusions are arrived at and further discussion of this interesting subject is reserved by the Committee until the publication of the results of the enquiry that has been in progress in other parts of the Madras Presidency. As far as enquiries have gone, it would appear that there is nothing in the conditions under which the people live, or in the rat and flea prevalence in the city, that is capable of explaining the remarkable degree of immunity that the City of Madras has enjoyed. Climatic conditions for at least three months in the year also appear to be not unfavourable to plague. It would appear probable that some factor or factors, possibly connected with its trade relations, are responsible for having kept infection out of the city. It is unlikely that the system whereby arrivals from plague infected parts of India are passported and subjected to a certain amount of surveillance in the Madras Presidency, is, at present at any rate, a factor of any importance in this direction. Further reports of the Committee on this subject are awaited with interest.

The paper dealing with the subject of immunity to plague of wild rats in India (chiefly *Mus rattus*) demonstrates the interesting fact that rats from different parts of India show very varying degrees of immunity. Moreover, rats caught in places in which epidemic plague has not occurred are very susceptible; rats from places that have suffered moderately, less so, whilst rats from places that have suffered from repeated epidemics have a very high degree of immunity to plague. This immunity appears to be transmissible from the rat to its offspring.

The Plague Commission have also conducted an enquiry on the subject of the distribution of plague in the districts of the United Provinces of Agra and Oudh. They have completed their observations but their report has not yet appeared. From the annual report of the Director of the Bombay Bacteriological Laboratory who anticipates some of their findings, it appears that grain and the grain trade appear to be factors of very great importance in the spread of the disease. Further discussion of this subject is postponed till after the appearance of the Advisory Committee's report.

Daily examination of rats caught and found dead within the confines of the Bombay Municipality is still carried out at the laboratory. During the year, 137,840 rats were thus examined and of these 7,662 were found to be plague infected.

As the provincial laboratory, the institution fulfils a most useful function as is evidenced by the large amount of routine work in the examination of pathological material, disinfectants, food stuffs, water, etc., that is therein carried out. The work done in this connection continues to increase year by year.

In addition to this routine the staff have carried out research work in connection with the following diseases, plague, diarrhœa, dysentery, cholera, tuberculosis, leprosy and dracontiasis. Captain Morison, I.M.S., was placed on deputation to undertake an investigation into the prevalence of diarrhœa in Poona. The inquiry has not yet been completed, but as far as it has gone it incriminates the water supply. In a fair percentage of cases bacilli of the dysenteric group (Shiga or Flexner) or of Morgan's No. I bacillus, organisms that in England and America have been incriminated as the causative agent of epidemics of diarrhoea are present.

During the outbreak of cholera in Bombay City in the summer of 1912, Captain Gloster, I.M.S., made some interesting observations on the subject of cholera vibrios. From the excreta of 15 patients with the symptoms of the disease, vibrios were isolated. The vibrios from eleven of these patients were agglutinated by cholera immune serum in high dilutions; those from the remaining four patients were not so agglutinated. There were no constant cultural or morphological differences between these two varieties. All the non-agglutinating strains were pathogenic to guinea-pigs (when injected intraperitoneally) and the two of them, that were so tested, were virulent for pigeons. Both agglutinating and non-agglutinating varieties hæmolysed human red blood corpuscles, whereas the latter variety alone hæmolysed goat's red cells. This latter consideration led Captain Gloster to the conclusion that it is very unlikely that the non-agglutinating variety is a true cholera vibrio that has lost its power of reacting with cholera serum.

Observations made on the subject of tuberculosis were directed chiefly to the determination of the extent that tuberculosis occurs amongst cattle in Bombay. As far as they have gone, they seem to show that bovine tuberculosis is at any rate very rare and not an important source in Bombay of human infection.

As regards leprosy, observations as to the therapeutic value of a vaccine prepared from a streptothrix isolated by Major Williams, I.M.S., have been continued. The laboratory has sent out a large quantity of the vaccine and the reports from the users exhibit a remarkable divergence of opinion as to its utility. Some have found it to act as a specific for the disease, whilst others have obtained no success at all. The laboratory staff's experience with the vaccine has been on the whole satisfactory. Whereas some observers have noted no reaction even after repeated large doses, others state that it is not possible to continue the administration of large doses without producing severe reactionary symptoms. The treatment has to be carried on for a long period in most cases. The question of its utility must still be left *sub judice*.

Dr. Turkhud of the laboratory staff is continuing his researches on the subject of dracontiasis. Leiper's observation that the larvæ of the guineaworm gains access to the body cavity of the cyclops by way of the intestinal tract of the latter has been confirmed: the cyclops appears to swallow the larvæ as food. In the water of a well in a village near Bombay, cyclops, naturally infected with the larvæ of *filaria medinensis*, were found in large numbers. The inhabitants of this village suffer very severely from guineaworm. Experimental feeding of monkeys with infected cyclops was carried out with, hitherto, negative results.

The King Institute of Preventive Medicine, Madras, consists of a Vaccine section and a Micro-biological section. The work done in the former has been referred to in the Vaccination section of this report. In the latter much useful

work was done during the year. Captain Cragg continued his entomological researches into the morphology and mechanism of the mouth apparatus in blood sucking flies, the nature of the digestive process in blood feeders and the dipterous fauna of the neighbourhood. His results have been published as numbers of the Scientific Memoirs. Captain Patton continued his researches on kala azar and some of his results were published in a paper in the Indian Journal of Medical Research for July 1913.

The systematic examination of actual and prospective water supplies of the Madras Presidency was continued on the same lines as in 1911. The results do not lend themselves to summary; they are published as appendices to the annual report of the Institute. There were 620 samples of water submitted to bacteriological analysis.

Though the number of pathological samples sent for examination is less than in the previous year, certain classes of these show a very marked increase; there were, for example, 481 samples of blood sent to the laboratory for Wasserman's test for syphilis as compared with 11 in the previous year.

Pasteur Institute, Kasauli.—During 1912 a larger number of persons than in any previous year underwent anti-rabic treatment. There were 3,548 patients against 2,268 the year before. Four hundred were Europeans. The steady increase in the numbers of patients treated year after year is most noteworthy. From the point of view of anti-rabic treatment this is now the largest Institute in the world. Patients came from all parts of Northern India, Burma, Kashmir, Rajputana and Central India. Of the total number treated 45 succumbed to hydrophobia; five dying during their treatment, twenty others within fifteen days of its completion: the remaining twenty died after a longer period of time than fifteen days from the termination of treatment. This last class constitute the "failures of treatment". The percentage failure rate was thus 0.56 as compared with 0.6 in 1911.

The increase in attendance in 1912, according to the Director, is largely accounted for by the action of the Institute itself in its attempts to gain statistics of people bitten by rabid animals who do not submit themselves to treatment. Each individual on his arrival is closely questioned about the number of persons bitten at the same time as himself and inquiries are then made with regard to such from the place whence he came. These inquiries frequently lead to other bitten persons being persuaded to avail themselves of treatment, who otherwise might have remained in ignorance of the existence of such institutes. This attempt to collect statistics for untreated individuals was only commenced in 1912. There is no evidence to show that rabies was more prevalent in Northern India than in former years.

As the Punjab provincial laboratory, the Pasteur Institute of Kasauli also reports a large increase in the work carried out; 1,507 specimens were examined compared with 1,052 in 1911. The Director and his staff also carried out experiments on the preparation and concentration of antivenene and other problems pertaining to snake bite. The results of these experiments will appear in the Indian Journal of Medical Research.

The annual report of the *Pasteur Institute of Southern India, Coonoor*, shows that this Institute also is each year becoming better known and more frequented. During the year, 1,240 patients underwent anti-rabic treatment, an increase of three hundred over the number in 1911. A part of this increase is attributed to the unusual prevalence of rabies in Quilon and adjacent parts of Travancore. Fourteen patients died of hydrophobia, 13 of these after the lapse of more than fifteen days from the completion of treatment. The failure of treatment rate was thus 1.05 per cent. All the fatal cases were the victims of deep bites on the bare skin: all but three had multiple bites: in four cases the bites were not cauterised at all and in six others they were cauterised late, *i.e.*, 24 hours or more after the bite. An attempt is being made by this Institute also to obtain statistics bearing on the mortality from hydrophobia of bitten persons who do not submit themselves to treatment. The staff of the Institute have, in addition

to their rabies work, carried out an inquiry into the etiology and prevalence of elephantiasis in Cochin. Their report on this subject is shortly to be published.

157. Two classes of instruction in malaria were held at Delhi during 1913, both being conducted by Captain E. C. Hodgson, I.M.S. The first extended from the 15th March to the 26th April and was attended by 33 candidates, composed of 10 civil and 8 military medical officers and 7 civil and 8 military medical subordinates. The second class assembled on the 15th September and concluded on the 25th October. It was attended by 26 candidates—3 civil and 5 military medical officers and 10 civil and 8 military medical subordinates.

These classes are in future to assemble annually on the 15th March and 15th September.

158. The first and second All-India Sanitary Conferences were referred to at length in the last report. The third Annual Conference will take place in Lucknow in January 1914 after this report has gone to press. These Conferences appear to be gaining in popularity and usefulness and the forthcoming Conference promises to be on a larger scale than either of its predecessors from the point of view of the number of delegates as well as of the number of contributions sent in.

159. In the last report the inauguration of the Indian Research Fund Association and its objects were described. In July 1913, the Association issued the first number of the Indian Journal of Medical Research. This Journal, the first of its kind in India, will issue four times a year. It has supplanted "Paludism." Contributions which under the former regime would have issued as separate numbers of the Scientific Memoirs will, unless prevented by their length or unsuitability of subject matter, now find a place in the Journal's pages. It is edited by the Director-General, Indian Medical Service and the Sanitary Commissioner with the Government of India, assisted by a strong staff of collaborating editors. That the Journal meets a real want and does so adequately, is evidenced by the gratifying reception that has been accorded its appearance. The scope and objects of the Journal are fully described in the first number as are also the Proceedings of the Research Fund Association.

160. Since the issue of the last report only the following number of the Scientific Memoirs has been published:—

No. 60. *Studies on the Mouth Parts and Sucking Apparatus of Blood-Sucking Diptera.* No. (4) *The Comparative Anatomy of the Proboscis in the Blood-Sucking Muscidae*, by Captain F. W. Cragg, M.D., I.M.S.

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A.—Groups.					Years.	Average strength.*	Constantly sick.	Invaliding.	RATIO PER			
									Influenza.		Cholera.	
									A	D	A	D
Group I.—Burma Coast and Bay Islands ...					1901-1910	1,200	58	19'9	8'6	...	...	08
					1911	1,210	27	8'3	19'0	...	...	...
					1912	1,195	39	4'2	...	...	...	...
„ II.—Burma Inland ...					1901-1910	1,919	58	21'6	1'8	...	1'4	1'04
					1911	1,219	37	...	...	...	...	...
					1912	1,207	34	3'3	...	...	...	...
„ IV.—Bengal and Orissa ...					1901-1910	1,843	62	34'1	12'5	...	7	49
					1911	1,939	27	4'6	...	...	...	...
					1912	1,978	29	10'1	...	...	5	...
„ V.—Gangetic Plain and Chutia Nagpur ...					1901-1910	6,497	52	23'5	4'1	...	7	54
					1911	6,012	30	12'1	14'6	...	4'3	2'00
					1912	5,897	28	7'3	6'3	...	3	17
„ VI.—Upper Sub-Himalaya ...					1901-1910	13,126	54	23'5	7'6	...	4	27
					1911	14,142	29	7'9	2'8	...	6	35
					1912	13,430	31	6'9	7'2	...	4	22
„ VII.—North-Western Frontier, Indus Valley and North-Western Rajputana.					1901-1910	4,801	53	30'1	39'4	02	3	31
					1911	5,600	34	6'8	7'3	...	...	...
					1912	5,505	32	7'4	3'4	...	...	...
„ VIII.—South-Eastern Rajputana, Central India and Gujarat.					1901-1910	5,798	58	29'6	5'8	...	1	05
					1911	6,009	33	8'0	1'5	...	...	...
					1912	5,923	33	10'5	5'1	...	1'0	68
„ IX.—Deccan ...					1901-1910	9,951	51	21'4	2'8	01	5	34
					1911	11,240	27	5'3	9	...	4	36
					1912	11,664	28	6'5	1'9	...	4	17
„ X.—Western Coast ...					1901-1910	1,517	55	20'4	1'9	...	1	...
					1911	1,609	29	7'5	1'9	...	...	...
					1912	1,509	37	8'6	4'0	...	...	...
„ XI.—Southern India ...					1901-1910	3,512	55	20'6	2'4	...	2	09
					1911	3,259	35	8'0	6'8	...	...	...
					1912	3,276	28	4'3	19'9	...	...	...
„ XII (a).—Hill Stations ...					1901-1910	10,778	41	17'7	6'4	01	3	17
					1911	12,196	25	5'7	3'4	...	...	...
					1912	12,014	22	5'8	2'2	...	...	...
„ XII (b).—Hill Convalescent Depôts and Sanatoria ...					1901-1910	3,620	66	34'3	4'1	...	2	11
					1911	3,718	38	9'7	3	...	...	...
					1912	3,362	39	6'8	1'7	...	...	...
India ...					1901-1910	68,663	52	24'4	7'5	01	5	33
					1911	72,371	29	7'1	3'9	...	1	29
					1912	71,001	29	6'7	4'5	...	3	14

* The decennial ratios are worked on the total strength of the ten year period.

MILLE OF STRENGTH.

A.—ADMISSIONS FROM

D.—DEATHS FROM

Small-pox.		Enteric fever.		Malaria.		Pyrexia of uncertain origin.		Pneumonia.		Dysentery.		Venereal diseases.		All Causes.	
A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D
·6	...	2·3	·42	115·1	·67	110·3	...	1·2	·25	28·6	1·83	259·1	·08	996·4	9·17
...	...	·8	...	30·6	...	111·6	...	1·7	...	3·3	...	52·9	·83	441·3	6·61
...	...	...	...	76·2	...	226·8	·84	·8	...	·8	...	77·8	...	719·7	9·20
·1	...	4·4	1·35	223·5	1·09	55·3	...	2·0	·52	11·4	·31	195·7	·21	970·2	8·80
...	...	1·6	...	55·8	...	114·0	...	...	...	10·7	...	114·8	...	676·0	4·92
...	...	...	...	55·5	·83	47·2	...	1·7	...	9·1	...	10·77	...	553·4	1·66
·8	·11	5·9	1·03	184·7	·76	62·2	...	3·6	·81	30·8	·81	252·5	·11	968·8	13·56
...	...	2·1	...	61·4	...	84·1	...	3·1	·52	16·5	·52	74·3	...	459·5	5·16
...	...	3·0	1·01	38·4	...	17·7	...	1·5	·51	1·0	...	90·5	...	463·6	7·58
1·3	·12	17·9	3·38	135·4	·23	70·7	...	2·9	·35	16·0	·58	148·0	·08	814·9	11·34
...	...	9·1	·50	51·7	...	53·6	...	3·3	1·00	10·6	·50	63·5	...	526·4	9·65
·2	...	7·1	·68	30·7	·17	48·2	·17	1·2	...	2·7	·34	66·8	...	498·0	6·27
·5	·02	17·9	3·92	262·5	·48	42·8	·01	4·8	·62	11·0	·57	130·7	·08	927·7	11·22
...	...	3·0	·21	81·9	·07	24·6	...	2·1	·14	4·3	...	46·5	·07	542·1	4·60
·4	·07	2·6	·52	95·0	·07	17·4	·07	2·7	·37	3·4	·37	49·6	...	640·2	4·54
·9	·10	11·6	2·85	360·1	·37	65·8	·04	4·7	·48	7·3	·08	121·2	·04	1,065·3	9·91
...	...	4·1	·89	137·5	·18	41·8	...	4·5	·36	6·2	·36	48·6	...	830·9	5·18
·4	...	·9	·36	154·8	·36	25·6	...	4·4	·54	1·8	·	56·1	·18	793·3	4·72
1·4	·05	21·0	5·24	349·0	·41	25·0	·07	3·4	·43	15·3	·64	170·6	·09	1,043·3	13·00
...	...	2·7	·33	165·3	...	6·0	...	2·0	·17	5·3	...	51·1	...	625·6	4·49
·7	...	1·2	·34	111·9	·17	6·4	...	2·5	·51	6·8	·34	52·8	...	621·8	5·07
·8	·04	17·6	3·45	141·3	·09	30·4	...	2·8	·26	18·5	·45	185·9	·12	807·7	9·43
...	...	5·0	·44	81·9	·09	15·9	...	1·6	·18	9·7	·36	56·4	...	428·9	4·18
...	...	3·4	·34	94·7	·34	13·1	...	1·5	·17	9·3	·09	55·3	...	507·4	4·80
·8	...	2·3	1·25	164·2	·46	9·0	...	2·8	·66	10·7	·07	210·0	·26	774·9	8·77
...	...	3·7	...	89·5	...	10·6	...	3·1	·62	4·4	·62	98·8	...	448·1	6·84
...	...	1·3	...	118·0	...	4·0	...	·7	·66	13·9	...	112·7	...	522·2	6·63
·5	·06	13·4	2·08	79·8	·14	30·8	...	2·3	·31	17·9	·17	203·9	...	862·9	6·75
...	...	3·7	·61	96·7	...	16·9	...	·6	·31	18·1	·31	89·0	...	692·2	4·30
·6	·31	3·4	·61	76·3	...	5·8	...	·9	·31	9·2	...	87·9	·31	631·0	3·66
·2	...	10·7	1·96	95·8	·18	28·5	...	3·7	·56	·84	·41	108·7	·16	657·4	6·70
...	...	2·8	·25	95·5	·16	12·4	...	1·6	·08	7·3	·49	36·9	...	436·8	3·53
...	...	1·2	·17	52·7	·08	12·5	...	2·1	·17	2·6	...	34·1	·08	392·5	3·33
·2	...	12·0	2·24	196·3	·30	17·0	...	3·5	·41	13·9	·44	133·8	·28	896·3	9·97
...	...	4·3	·27	82·6	·27	17·5	...	1·1	·27	10·0	·27	50·3	...	546·3	6·46
·3	·30	4·5	·89	84·5	·30	11·3	...	2·1	·30	4·8	·30	43·1	...	514·3	5·65
·7	·04	14·1	2·92	197·9	·35	39·9	·01	3·7	·47	14·3	·49	152·5	·12	864·2	9·91
·0	...	3·8	·33	90·2	·08	26·4	...	2·1	·26	7·7	·26	53·1	·03	524·7	4·89
·2	·04	2·6	·39	82·4	·17	21·2	·04	2·2	·28	5·2	·15	55·5	·04	547·9	4·62

B.—Admission and death rates from Enteric fever in stations of over 1,000 strength.

Stations.	1912.		DECENNIMUM, 1901-1910.		Stations.	1912.		DECENNIMUM, 1901-1910.	
	Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.		Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.
Lucknow ...	5'5	1'68	25'5	4'23	Colaba ...	1'7	...	2'0	1'46
Poona ...	5'3	...	21'1	3'96	Bareilly ...	1'5	...	12'2	2'17
Secunderabad ...	5 0	'94	17'5	3'70	Ranikhet and Chaubattia	1'2	'62	14'6	2'31
Ambala ...	4'8	1'91	17'3	3'82	Mhow and Indore ...	1'1	...	24'0	4'90
Fort William ...	4'8	1'61	3'2	'26	Jhansi ...	1'0	'97	28'3	8'61
Bangalore ...	4'6	'93	18'2	2'56	Cawnpore ...	1'0	...	12'0	2'92
Lahore Cantonment and Fort.	3'8	...	18'8	4'04	Ahmednagar ...	1'0	...	14'4	3'32
Belgaum ...	3'7	...	10'8	2'34	Kirkee ...	'9	...	22'7	2'69
Meerut ...	3'2	'46	28'6	6'04	Chakrata ...	'8	...	6'0	'85
Rawalpindi ...	2'7	...	17'9	3'28	Peshawar ...	'6	...	20'4	4'96
Jubbulpore ...	2'7	'45	23'5	4'82	Quetta ...	'3	...	15'3	2'82
Sialkot ...	1'9	'93	18'2	4'30	Karachi ...	...	...	4'6	'96
Nowshera ...	1'9	'95	9'1	3'30	Rangoon ...	...	...	2'5	'46

Period.	C.—OFFICERS.				D.—WOMEN.				E.—CHILDREN.			
	*Average annual strength.	Admission rate per 1,000.	Constantly sick rate per 1,000.	Death rate per 1,000.	*Average annual strength.	Admission rate per 1,000.	Constantly sick rate per 1,000.	Death rate per 1,000.	*Average annual strength.	Admission rate per 1,000.	Constantly sick rate per 1,000.	Death rate per 1,000.
1901-1910 ...	2,190	710'9	27'3	10'87	3,344	675'7	29'6	10'32	5,397	441'2	19'5	36'91
1911 ...	2,345	582'1	20'6	8'10	4,248	495'8	20'4	7'30	7,056	370'6	13'2	30'33
1912 ...	2,278	597'9	22'2	4'39	4,147	510'5	21'2	9'16	7,046	389'6	15'1	33'49

*The decennial rates are worked on the total strength of the ten year period.

A.—ARMIES AND DIVISIONS.	Years.	Average strength.	RATIO PER MILLE OF STRENGTH.											
			Admis- sions into hospital.	Constantly sick.	DEATHS FROM									
					Cholera.	Small-pox.	Enteric Fever.	Malaria.	Tubercle of the lungs.	Pneumonia.	Dysentery.	Abscess of the liver.	All causes.	Mortality in- cluding ab- sent deaths.*
Northern Army ...	1911	62,777	572	22	*03	...	*53	*59	*32	1*23	*13	*02	5*26	...
	1912	62,026	634	23	*18	*02	*58	*23	*34	1*02	*10	*03	4*48	...
Southern Army ...	1911	50,146	511	20	*16	...	*44	*24	*10	*82	*12	*02	4*17	...
	1912	51,547	506	20	*48	*04	*48	*27	*16	*80	*10	*08	4*81	...
1st (Peshawar) Division ...	1911	10,133	681	23	...	...	*69	*79	*20	1*58	*10	...	4*74	...
	1912	9,795	749	24	*10	...	*82	*31	*31	*92	*10	*10	3*42	...
2nd (Rawalpindi) „ ...	1911	10,567	530	22	...	...	*76	*28	*57	*76	...	...	4*73	...
	1912	10,731	593	23	...	*09	*28	*37	*09	*84	*09	...	3*35	...
3rd (Lahore) „ ...	1911	10,939	460	18	...	...	*18	*37	*46	1*01	*18	*09	4*39	...
	1912	10,609	618	22	...	...	*47	*28	*38	1*23	*09	...	4*90	...
4th (Quetta) „ ...	1911	9,483	482	20	*11	...	*84	*53	*21	*63	...	*11	4*43	...
	1912	9,155	499	17	...	...	*33	*22	*55	*76	...	...	4*70	...
5th (Mhow) „ ...	1911	14,272	440	18	...	...	*49	*14	*14	*84	*07	...	3*22	...
	1912	14,415	491	19	*42	*07	*35	*28	*07	1*11	...	*14	4*72	...
6th (Poona) „ ...	1911	9,742	567	24	...	...	*62	*10	*10	1*33	*10	...	3*70	...
	1912	10,486	515	22	*76	*10	*95	*48	*10	1*05	*19	*10	6*58	...
7th (Meerut) „ ...	1911	12,447	439	22	*16	...	*88	*88	*40	*80	*16	...	6*99	...
	1912	11,101	551	27	*09	...	*81	*09	*99	1*53	...	...	6*40	...
8th (Lucknow) „ ...	1911	10,159	530	20	...	...	*10	*49	...	*30	*30	...	3*35	...
	1912	11,189	590	21	*80	...	*36	*09	*18	*71	*27	*09	4*56	...
9th (Secunderabad) „ ...	1911	10,511	454	17	*67	...	*10	*10	...	*19	*19	...	4*09	...
	1912	10,609	448	17	1*04	...	*66	...	*09	*38	*19	*09	4*90	...
Burma Division ...	1911	4,733	729	27	...	...	...	*63	...	1*27	*21	...	6*97	...
	1912	4,903	649	24	...	...	...	*41	...	*41	...	...	1*84	...
Kohat, Derajat and Bannu Brigades ...	1911	8,532	879	27	...	...	*47	*70	*23	3*40	...	...	7*38	...
	1912	8,601	737	25	...	...	*81	*23	...	*81	...	...	3*95	...
Aden Brigade ...	1911	1,405	713	27	...	...	...	...	...	1*42	*71	...	6*41	...
	1912	862	550	24	...	...	...	...	...	...	1*16	...	3*48	...
ARMY OF INDIA ...	1911	131,213	516	20	*11	...	*42	*42	*21	*98	*12	*02	4*48	6*78
	1912	132,232	548	20	*29	*02	*47	*26	*24	*83	*10	*05	4*42	5*66

* Worked on the average annual strength of the troops present with and absent from their regiments during the year.

B.—Groups.					Years.	Average Strength.	RATIO PER					
							Constantly sick.	Invalid-ings.	A.—A D M ISSIONS			
									D.—D EATHS			
									Influenza.		Cholera.	
							A	D	A	D		
Group	I.—Burma Coast and Bay Islands	...	...	{	1901-1910	1,323	22'9	...	2'1	...	...	...
					1911	1,298	30'8	...	3'9	...	...	...
					1912	1,185	29'5	...	'8	...	...	...
„	II.—Burma Inland	...	...	{	1901-1910	3,281	26'5	...	'2	...	'2	'15
					1911	2,568	23'4	...	...	...	...	...
					1912	2,849	22'5	...	4'2	...	...	...
„	III.—Assam	...	...	{	1901-1910	1,068	31'1	...	1'0	...	'4	'28
					1911	884	18'1	...	...	...	...	...
					1912	933	23'6	...	...	...	...	...
„	IV.—Bengal and Orissa	...	...	{	1901-1910	2,248	29'0	...	5'1	...	'2	'31
					1911	2,296	24'0	...	...	...	...	...
					1912	2,332	25'3	...	'9	...	'4	'43
„	V.—Gangetic Plain and Chutia Nagpur	...	...	{	1901-1910	6,360	20'2	...	2'7	'02	'9	'57
					1911	6,032	18'9	...	3'2	...	...	...
					1912	6,441	16'9	...	'5	...	2'8	1'24
„	VI.—Upper Sub-Himalaya	...	...	{	1901-1910	18,550	22'1	...	2'2	...	'4	'32
					1911	21,805	20'1	...	3'9	...	'1	...
					1912	21,418	25'1	...	7'7	...	'0	'05
„	VII.—North-Western Frontier, Indus Valley and North Western Rajputana.	...	...	{	1901-1910	17,938	28'7	...	5'2	...	'3	'22
					1911	19,447	23'7	...	2'9	...	'1	'05
					1912	18,302	22'7	...	2'7	...	'1	'05
„	VIII.—South-Eastern Rajputana, Central India and Gujarat.	...	...	{	1901-1910	12,188	24'8	...	2'2	...	'1	'04
					1911	11,170	17'3	...	1'6	...	...	...
					1912	11,394	19'0	...	1'3	...	1'3	'53
„	IX.—Deccan	...	...	{	1901-1910	16,648	20'3	...	3'5	'02	'8	'50
					1911	16,656	18'7	...	'3	...	'4	'30
					1912	18,039	19'7	...	1'5	...	2'5	1'00
„	X.—Western Coast	...	...	{	1901-1910	1,850	30'5	...	1'0	...	'1	'05
					1911	1,987	39'8	...	2'0	...	...	...
					1912	1,999	23'5	...	3'5	...	'5	'50
„	XI.—Southern India	...	...	{	1901-1910	5,623	24'5	...	'9	...	'9	'59
					1911	4,898	18'6	...	...	...	'6	'41
					1912	4,683	16'7	...	6'4	...	'2	...
„	XII.—Hill Stations	...	...	{	1901-1910	22,111	27'6	...	6'2	'03	'4	'24
					1911	22,477	22'7	...	7'5	...	'1	'09
					1912	22,019	21'3	...	2'7	...	...	...
Army of India	...	...	...	{	1901-1910	126,331	23'8	'87	3'9	'01	'5	'30
					1911	131,213	19'8	4'43	3'0	...	'1	'11
					1912	132,232	20'1	...	3'4	...	'6	'29

TROOPS—*contd.*

MILLE OF STRENGTH.

FROM

FROM

Small-pox.		Enteric fever.		Malaria.		Pyrexia of uncertain origin.		Pneumonia.		Dysentery.		Venereal diseases.		All causes.	
A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D
'2	...	'1	...	164'1	'76	66'4	'15	2'3	'68	56'2	'23	29'2	'08	677'3	5'14
...	...	...	...	79'4	...	110'2	...	3'1	1'54	26'2	...	33'9	...	741'9	5'39
...	...	...	...	146'0	...	17'7	...	3'4	...	7'6	...	36'3	...	661'6	4'38
'1	...	'4	'06	303'7	1'71	24'2	'09	2'8	'58	28'1	'21	18'0	...	735'1	5'94
'8	...	'4	...	228'6	1'17	153'8	'39	3'5	'78	12'1	'39	10'5	...	742'6	7'40
'7	...	...	...	223'5	'70	51'2	...	2'5	'35	5'3	...	14'0	...	632'9	1'40
'1	...	1'9	'47	318'9	1'50	3'0	...	7'4	'94	50'7	'75	28'2	...	834'6	6'18
...	...	...	...	110'9	...	14'7	...	12'4	1'13	9'0	...	17'0	...	485'3	2'26
...	...	1'1	...	184'4	...	43'9	...	9'6	1'07	30'0	...	20'4	...	716'0	8'57
'3	...	'4	'18	307'1	1'38	22'7	'13	7'0	1'33	62'2	'44	26'9	'09	752'7	6'27
...	...	1'3	...	114'1	'87	88'4	...	5'7	...	27'9	'44	20'5	'44	586'7	3'48
...	...	1'3	'43	176'7	...	160'4	'43	9'0	'86	19'3	1'29	15'9	...	817'3	5'15
'5	'02	'5	'22	151'8	'99	11'4	'09	8'3	1'64	36'7	'28	17'7	'09	536'5	7'01
...	...	'3	...	55'7	'50	52'4	...	5'5	'33	34'3	'33	19'4	...	513'1	3'48
'6	...	2'0	'47	22'5	'16	40'8	'16	4'0	'62	10'1	...	13'4	'16	446'4	4'04
'6	'03	1'8	'49	212'4	1'01	14'5	'08	13'8	2'51	27'4	'13	18'2	'04	591'5	7'64
'3	...	2'8	'64	69'6	'46	24'3	...	8'5	'87	19'4	'09	14'4	'05	476'0	5'92
'6	'05	1'5	'33	72'8	'09	55'6	'19	7'2	1'03	13'2	...	17'9	'05	638'2	4'34
'6	'03	1'6	'28	387'4	1'05	8'3	'04	18'6	3'61	47'1	'18	13'2	'02	900'8	8'40
'4	...	3'0	'67	166'7	'57	19'9	'05	12'3	2'42	31'7	'05	6'3	...	714'1	5'55
'9	...	2'4	'75	134'5	'16	37'3	'11	7'5	'48	16'2	'05	8'5	'05	705'4	3'16
'7	'01	1'1	'33	301'8	1'14	7'5	'05	13'3	2'41	23'9	'14	26'1	'04	718'0	7'38
'2	...	4'7	'63	85'0	'18	9'8	...	5'8	'90	18'9	...	13'0	'09	436'0	3'13
1'0	'09	2'3	'44	65'4	...	42'2	...	7'9	1'05	23'4	...	12'3	'09	478'3	4'21
'8	'03	1'3	'22	127'7	'53	21'7	'05	7'1	1'15	28'3	'15	30'1	'05	518'2	6'04
'4	...	2'4	'36	59'3	'06	34'6	'30	4'9	'42	21'1	'12	21'1	'06	449'7	3'00
'4	...	2'8	1'00	56'1	'44	42'5	'11	6'3	'72	15'4	'05	19'7	'03	479'8	5'99
1'9	'05	'9	'54	238'0	1'24	8'4	'05	9'3	2'38	56'3	'65	43'5	'16	762'3	11'52
'5	...	3'0	'50	315'6	'50	59'9	'50	11'6	4'53	56'9	'50	22'1	...	983'9	11'07
...	'50	...	...	126'1	'50	25'0	...	10'0	2'00	61'0	1'00	16'0	...	610'8	8'00
'7	'07	'4	'05	146'4	'60	23'2	'05	8'7	1'64	26'7	'34	34'4	'07	579'0	8'89
'8	...	'8	...	172'7	'20	21'8	...	6'7	'20	14'1	'20	20'6	...	501'6	3'88
...	...	'2	...	143'3	...	10'9	'21	2'6	'21	8'8	'21	19'4	...	486'7	3'63
'3	'05	2'0	'50	241'1	1'28	18'9	'05	15'5	3'03	34'8	'26	21'1	'06	686'8	10'49
'2	...	2'9	'62	110'0	'67	31'0	'13	8'5	'71	16'8	'09	16'3	...	520'6	4'89
'3	...	2'9	'59	89'5	'45	45'1	'14	8'5	1'54	6'6	'09	9'3	...	548'3	5'63
'5	'03	1'3	'29	238'6	1'02	14'9	'05	12'2	2'26	35'7	'24	21'0	'04	555'3	7'88
'3	...	2'3	'42	105'0	'42	31'0	'08	7'5	'98	22'6	'12	14'9	'03	515'8	4'48
'5	'02	1'8	'47	88'9	'26	44'1	'11	6'6	'83	16'7	'10	14'4	'05	547'5	4'42

i—ACTUAL. 2—RATIOS.

C.—PLAINS AND HILLS.	Average annual strength.	Malaria.		Tubercle of the lungs.		Pneumonia.		Respiratory diseases.		Dysentery and Diarrhoea.		Scurvy.		Anæmia and Debility.		All causes.		Average number constantly sick.	
		A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D		
1908.	{ Plains ... }	98,133 {	27,893	51	272	32	1,210	214	1,720	26	4,724	28	140	...	1,144	12	67,837	653	2,201
			284.2	.52	2.8	.33	12.3	2.18	17.5	.26	48.1	.29	1.4	...	11.7	.12	691.2	6.65	22.4
	{ Hills ... }	23,465 {	5,545	22	92	20	364	60	582	11	1,054	8	48	...	352	3	14,660	232	550
			236.3	.94	3.9	.85	15.5	2.56	24.8	.47	44.9	.34	2.0	...	15.0	.13	624.1	9.89	23.4
	{ Hills above 5,000 feet sea-level. }	12,079 {	1,757	7	60	13	167	29	263	6	581	5	19	...	145	1	5,914	101	218
145.5	.58		5.0	1.08	13.8	2.40	21.8	.50	48.1	.41	1.6	...	12.0	.08	489.6	8.36	18.0		
1909.	{ Plains ... }	103,073 {	20,399	30	206	22	1,228	186	1,898	19	4,265	20	118	2	1,187	4	62,981	538	2,119
			197.9	.29	2.0	.21	11.9	1.80	18.4	.18	41.4	.19	1.1	02	11.5	.04	611.0	5.22	20.6
	{ Hills ... }	24,735 {	3,067	6	86	29	308	61	612	7	718	3	54	...	249	2	11,894	192	501
			124.0	.24	3.5	1.17	12.5	2.47	24.7	.28	29.0	.12	2.2	...	10.1	.08	481.0	7.76	20.3
	{ Hills above 5,000 feet sea-level. }	13,223 {	1,054	4	49	15	130	32	314	3	383	2	17	...	106	...	5,269	100	227
79.7	.30		3.7	1.13	9.8	2.42	23.7	.23	29.0	.15	1.3	...	8.0	...	398.5	7.56	17.2		
1910.	{ Plains ... }	103,468 {	17,553	28	240	14	1,003	143	2,562	26	3,519	15	73	1	1,094	3	60,450	505	2,140
			169.6	.27	2.3	.14	9.7	1.38	24.8	.25	35.0	.14	.7	.01	10.6	.30	584.2	4.88	20.7
	{ Hills ... }	23,650 {	3,097	4	58	9	223	33	530	10	699	2	22	...	266	...	12,847	119	526
			131.0	.17	2.5	.38	9.4	1.40	22.4	.42	29.6	.08	.9	...	11.2	...	543.2	5.03	22.2
	{ Hills above 5,000 feet sea-level. }	12,483 {	904	1	26	2	102	16	284	4	327	1	11	...	154	...	5,114	57	223
72.4	.08		2.1	.16	8.2	1.28	22.8	.32	26.2	.08	.9	...	12.3	...	409.7	4.57	17.9		
1911.	{ Plains ... }	103,785 {	10,481	35	208	16	745	107	2,751	27	2,992	13	84	1	1,063	8	52,483	453	1,957
			101.0	.34	2.0	.15	7.2	1.03	26.5	.26	28.8	.13	.8	.01	10.2	.08	505.7	4.36	18.9
	{ Hills ... }	22,477 {	2,472	15	56	9	191	16	719	12	610	4	9	...	229	...	11,702	110	510
			110.0	.67	2.5	.40	8.5	.71	32.0	.53	27.1	.18	.4	...	10.2	...	520.6	4.89	22.7
	{ Hills above 5,000 feet sea-level. }	11,741 {	944	6	27	3	104	9	358	3	277	2	4	...	122	...	4,998	56	237
80.4	.51		2.3	.26	8.9	.77	30.5	.25	23.6	.17	.3	...	10.4	...	425.7	4.77	20.2		
1912.	{ Plains ... }	103,834 {	9,134	19	187	17	672	73	2,306	11	3,254	12	128	1	1,136	8	57,252	421	2,047
			88.0	.18	1.8	.16	6.5	.70	22.2	.11	31.3	.12	1.1	.01	10.9	.08	551.4	4.05	19.7
	{ Hills ... }	22,019 {	1,971	10	60	12	187	34	687	8	506	2	21	...	322	...	12,074	124	470
			89.5	.45	2.7	.54	8.5	1.54	31.2	.36	23.0	.09	1.0	...	14.6	...	548.3	5.63	21.3
	{ Hills above 5,000 feet sea-level. }	11,625 {	606	2	25	7	90	13	409	4	229	1	10	...	145	...	5,092	54	211
52.1	.17		2.2	.60	7.7	1.12	35.2	.34	19.7	.09	.9	...	12.5	...	438.0	4.65	18.2		
{ Hills below 5,000 feet sea-level. }	10,394 {	1,365	8	25	5	97	21	278	4	277	1	11	...	177	...	6,982	70	259	
		131.3	.77	2.4	.48	9.3	2.02	26.7	.38	26.6	.10	1.1	...	17.0	...	671.5	6.73	24.9	

D—ENTERIC FEVER.						1901-1910.		1912.	
						Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.
European troops	...	...	...	...	...	14'1	2'92	2'6	'39
Indian troops*	...	...	...	...	...	1'3	'29	1'8	'47
Gurkhas only	...	...	...	...	...	3'8	'86	3'3	'84
Prisoners	...	...	...	...	...	'7	'19	'8	'11

* Including Gurkhas also.

						E—TUBERCLE OF THE LUNGS, 1912.		F—VENEREAL DISEASES, 1912.	
						Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	
Army of India excluding Gurkhas	...	...	...	...	...	1'7	'16		13'9
Gurkhas only	...	...	...	...	...	4'1	'84		18'5

			G—INFLUENZA.				H—PNEUMONIA.			
			1901-1910.		1912.		1901-1910.		1912.	
			Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.
European troops	...	...	7'5	'01	4'5	...	3'7	'47	2'2	'28
Indian troops	...	...	3'9	'01	3'4	...	12'2	2'26	6'6	'83
Prisoners	...	...	7'9	'08	1'2	'02	12'3	3'24	9'1	2'20

A.—Highest, lowest and mean temperature in shade and its departure from the

Station.	JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.				JUNE.			
	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
Calcutta (Alipore)...	86.9	52.0	68.0	+1.7	90.9	58.0	74.3	+3.1	99.1	60.0	81.1	+0.9	98.6	63.0	84.1	-1.5	102.1	71.0	86.4	+0.5	100.1	73.0	86.2	+1.4
Narayanganj ...	81.5	52.3	67.4	+0.9	88.5	57.8	72.9	+2.5	95.5	58.8	78.8	-0.3	91.5	61.8	79.1	-4.7	94.5	71.3	83.1	-0.4	95.5	70.3	84.5	+0.9
Chittagong ...	83.0	50.5	67.3	+0.5	88.0	56.5	72.0	+1.4	90.0	60.0	76.7	-0.5	90.5	59.5	77.9	-3.4	92.0	68.5	81.7	-0.3	92.0	70.0	82.0	+0.3
Sibsagar ...	75.6	44.0	59.3	-0.5	77.6	49.0	63.4	+0.2	83.6	53.0	68.6	-1.0	84.6	54.5	70.9	-3.7	91.1	67.0	78.8	-0.1	94.6	71.5	82.5	-0.3
Silchar ...	84.3	46.3	66.3	+1.3	95.3	54.3	69.1	+0.9	89.8	56.3	73.4	-1.3	90.3	58.3	74.3	-4.5	95.3	66.3	80.6	0	93.8	70.3	82.3	-0.5
Cuttack ...	90.4	52.7	71.9	-0.2	95.4	61.2	77.2	-0.7	106.4	69.2	85.8	+1.1	105.4	71.7	89.0	-1.1	113.4	76.2	92.8	+1.9	109.9	71.2	88.3	+0.5
Hazarlbagh ...	81.6	45.0	61.8	0	88.6	52.0	68.6	+2.3	100.6	54.0	75.6	-0.5												no in
Patna ...	80.0	42.7	61.1	-0.5	87.0	52.2	68.6	+2.7	98.0	54.2	75.1	-2.3	98.5	63.2	81.9	-5.1	103.5	71.2	88.3	-0.7	107.0	68.2	89.3	+1.1
Darjeeling ...	52.3	30.2	41.2	+0.4	55.3	34.2	44.0	+2.3	65.3	36.2	49.6	+0.2	63.8	41.2	52.6	-2.9	69.8	47.2	58.6	+0.4	71.3	51.7	61.8	+1.1
Allahabad ...	85.6	40.5	61.5	+0.3	91.6	47.5	68.4	+2.4	104.1	50.0	75.2	-2.3	107.1	62.0	86.8	-1.3	113.6	73.0	93.6	+0.4	115.6	71.5	95.2	+3.1
Lucknow ...	84.5	42.6	61.1	+0.8	90.0	47.1	66.9	+2.1	102.0	48.6	73.9	-2.0	104.0	61.1	84.9	-1.7	111.0	70.1	91.1	-0.3	112.0	70.1	92.8	+1.9
Delhi ...	80.0	45.8	58.8	-0.5	84.0	50.3	64.8	+1.5	95.0	49.8	71.7	-3.1	105.0	62.3	84.3	-2.3	111.5	68.3	91.9	-0.5	113.0	74.3	95.7	+2.5
Agra ...	84.0	47.0	61.5	+0.5	90.0	48.0	67.2	+1.7	102.0	51.0	74.2	-2.7	106.5	65.5	86.9	-1.3	116.0	73.5	95.3	+0.9	117.5	75.0	98.1	+3.7
Jhansi ...	90.5	44.5	64.0	+0.2	94.0	48.5	69.7	+1.5	103.0	50.5	76.0	-3.7	108.0	67.5	88.5	-1.9	117.5	76.0	96.4	+0.5	116.5	73.5	97.3	+3.9
Ajmer ...	88.4	44.2	62.5	+2.7	89.9	47.7	67.6	+3.9	97.4	47.2	73.2	-1.3	105.4	66.2	86.1	+0.8	114.4	73.2	94.3	+2.8	111.9	73.7	94.8	+4.1
Saugor ...	89.3	44.6	66.0	+1.7	92.3	54.1	71.1	+2.7	99.3	55.1	77.1	-1.2	105.3	67.6	86.6	-0.6	113.3	76.1	93.4	+1.6	112.3	67.1	92.5	+4.9
Jubbulpore ...	85.8	43.3	64.0	+1.1	90.8	50.3	69.6	+2.3	100.8	45.3	75.4	-1.4	105.3	59.3	85.9	-0.4	113.3	71.8	92.3	+0.1	112.3	74.3	93.4	+5.7
Multan ...	74.3	41.5	57.3	+0.5	88.3	45.5	66.1	+5.5	96.3	45.0	72.1	-0.3	107.3	57.0	82.5	-1.3	120.3	68.5	93.0	+0.9	119.3	72.5	98.7	+2.9
Lahore ...	73.9	40.2	56.6	+1.7	86.9	42.7	62.8	+4.4	95.9	45.2	68.8	-0.8	104.4	57.2	79.7	-1.5	116.9	67.2	91.0	+1.9	118.4	73.2	96.1	+2.8
Peshawar ...	71.2	32.9	51.0	-0.5	77.2	39.9	58.1	+3.7	89.2	37.9	63.3	-0.7	101.2	52.4	73.6	-0.3	111.2	60.9	85.7	+1.4	118.2	68.4	92.7	+1.1
Chakrata ...	66.7	28.7	43.6	+0.3	68.7	32.2	48.0	+4.3	72.7	31.7	52.7	-0.3	75.7	43.2	58.5	-2.7	80.2	45.2	64.3	-0.9	85.7	50.2	67.7	+0.5
Indore ...	88.1	43.6	66.5	+1.9	94.1	49.6	71.2	+3.5	100.6	45.1	76.0	-0.5	105.6	61.1	85.7	+0.5	112.1	69.1	91.0	+1.6	110.1	72.1	89.5	+4.7
Deesa ...	94.3	48.9	71.9	+4.6	100.3	53.4	75.1	+4.3	104.8	49.4	79.8	-0.2	111.8	66.9	90.1	+2.2	121.8	72.9	94.8	+2.7	116.8	73.9	93.9	+2.7
Karachi ...	83.0	57.0	69.2	+2.7	87.0	57.0	72.0	+2.9	92.5	59.5	75.2	+0.3	93.0	69.5	80.9	+1.1	102.5	74.5	84.1	+0.1	102.0	82.0	87.7	+1.0
Bombay ...	92.0	64.5	77.2	+2.0	92.0	66.5	77.9	+2.3	92.5	69.5	80.1	+0.5	94.0	74.5	84.9	+1.8	95.0	73.0	86.6	+0.9	95.5	75.5	85.5	+2.0
Belgaum ...	88.3	49.5	70.9	+0.4	91.8	52.0	73.2	-0.9	99.3	51.0	77.9	-1.2	99.3	63.5	81.9	+0.2	98.3	63.5	80.9	+0.3	97.3	60.5	76.1	+1.7
Nagpur ...	91.6	48.8	70.0	+0.4	95.6	55.3	74.8	+0.2	106.6	55.8	82.4	-0.6	109.1	62.3	89.5	-1.3	117.6	73.3	95.9	+0.2	114.6	75.3	95.5	+7.1
Bellary ...	94.0	52.8	75.9	+1.9	101.0	65.3	82.9	+3.1	106.0	66.3	87.9	+1.7	107.0	71.3	91.5	+1.3	108.0	74.3	92.0	+2.0	106.0	73.8	88.2	+3.1
Bangalore ...	86.3	48.8	69.1	+0.6	91.8	60.3	75.7	+3.1	97.3	59.8	79.3	+1.6	98.8	66.3	82.5	+1.3	98.3	64.8	83.0	+2.9	92.8	62.8	76.1	+0.4
Madras ...	87.0	60.5	74.6	-1.5	89.5	66.5	78.9	+1.5	95.0	68.5	83.0	+1.9	95.0	72.5	85.1	0	111.5	77.0	91.5	+1.7	108.5	75.0	92.4	+2.8
Rangoon ...	90.1	61.9	76.4	-0.3	95.6	65.9	79.5	+0.1	99.1	67.4	83.5	-0.3	102.0	71.0	87.5	-0.1	102.0	72.5	86.5	+0.9	93.0	74.5	82.1	+0.6
Akyab ...	83.4	54.5	70.0	-0.3	88.9	59.0	73.5	+0.3	90.9	66.5	79.9	+0.9	98.9	65.5	83.1	-0.8	95.9	69.5	83.9	-0.5	93.9	73.0	82.2	+0.2

average of each month at thirty-two stations in India during 1912.

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				DECEMBER.				Station.
Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
93°1	74°5	84°1	+0°8	92°1	75°5	83°6	+0°9	94°1	76°5	84°6	+1°7	92°1	67°0	81°1	+0°6	87°1	56°5	72°9	−0°1	82°1	52°5	66°2	−0°1	Calcutta (Alipore).
91°5	76°3	83°7	0	91°5	74°8	83°6	+0°4	93°5	71°8	84°0	+0°3	91°0	70°3	81°0	−0°6	89°0	59°8	74°2	−0°6	79°0	54°8	67°5	−0°1	Narayanganj.
89°5	74°5	82°0	+0°8	91°0	75°0	81°8	+1°0	91°0	73°0	81°8	+0°3	90°0	68°0	79°6	−0°4	87°5	59°0	74°7	+0°3	80°5	52°5	66°7	−1°3	Chittagong.
94°1	74°0	83°3	−0°7	94°6	74°5	83°5	+0°1	93°6	72°5	81°8	−0°3	87°6	62°5	76°2	−1°6	80°6	55°0	68°5	−0°	74°6	47°5	61°1	0	Sibsagar.
95°3	71°8	83°5	−0°2	98°3	73°3	83°8	+0°7	95°8	73°3	82°9	−0°2	94°3	66°3	80°0	−0°5	91°8	58°3	74°5	+0°3	82°3	50°3	66°6	−0°7	Silchar.
98°9	76°2	84°1	−0°1	93°4	76°7	83°9	+0°2	93°4	75°2	83°8	−0°3	91°5	63°2	81°6	−0°6	85°5	53°2	73°4	−2°2	82°0	52°2	66°6	−3°8	Cuttack.
for matio n ava ilable,																								Hazaribagh.
93°5	75°7	83°8	−1°1	93°5	76°2	84°3	−0°1	93°5	73°7	84°1	−0°5	93°5	66°2	80°7	+0°3	85°0	51°2	69°9	−1°3	76°0	48°2	62°0	−0°9	Patna.
70°3	55°2	62°1	+0°3	71°8	55°2	62°5	+1°1	70°8	52°2	60°7	+0°9	66°8	44°2	56°7	+1°5	62°8	34°7	49°2	+0°9	59°3	34°2	43°0	+0°3	Darjeeling.
106°1	74°5	86°0	+0°5	95°1	76°0	84°1	−0°1	96°1	65°5	83°4	−0°7	95°6	58°5	79°0	−0°1	89°1	45°5	68°9	−0°3	80°6	42°5	60°4	−1°3	Allahabad.
104°0	74°6	86°4	+0°7	96°0	75°6	84°8	+0°3	96°0	65°1	83°6	−0°7	96°0	59°1	79°5	+1°1	87°5	46°6	63°1	+0°1	73°0	42°6	60°5	−0°5	Lucknow.
109°5	75°3	89°7	+2°3	99°5	74°8	86°2	+0°7	97°0	67°3	82°3	−2°7	97°0	60°8	79°6	−0°4	88°5	45°8	67°5	−2°1	77°0	43°8	60°4	−0°9	Delhl.
112°5	76°0	90°0	+3°2	99°5	76°0	86°2	+1°3	99°5	70°0	83°0	−1°9	98°5	61°0	81°1	+0°7	92°0	45°5	69°4	−0°7	80°5	44°5	61°7	−0°7	Agra.
107°0	74°0	86°9	+1°9	96°0	76°0	83°2	+0°1	101°5	67°0	81°4	−2°3	94°5	56°5	78°3	−2°7	91°0	42°5	68°3	−3°7	80°5	41°5	61°2	−3°9	Jhansi.
97°4	74°7	84°1	+0°7	90°6	74°7	81°1	−0°7	95°6	69°2	81°5	−0°7	96°1	59°7	79°3	+1°7	90°1	44°2	67°5	+0°1	80°1	41°7	61°1	+0°1	Ajmer.
99°3	71°1	81°5	+1°9	90°3	70°6	78°3	+0°1	94°8	66°1	78°0	−1°1	94°3	60°1	77°9	+1°3	88°3	45°1	63°9	−0°7	80°3	48°1	63°8	−0°5	Saugor.
99°3	72°8	82°4	+2°1	90°3	72°8	79°7	+0°4	91°3	63°8	79°0	−1°1	91°8	53°8	75°7	0	87°8	40°8	67°6	+0°1	79°8	39°8	60°0	−1°4	Jubbulpore.
114°3	77°0	97°0	+3°2	108°3	78°0	92°4	+1°0	105°3	65°0	87°9	−1°1	103°8	58°5	81°6	+1°7	92°8	43°5	68°7	+0°3	82°8	39°5	60°4	+1°3	Multan.
111°9	76°2	91°7	+1°7	101°9	73°7	87°5	−0°5	103°4	62°7	85°4	−0°3	103°4	55°2	78°5	+1°5	90°9	38°7	65°2	0	77°4	37°2	56°9	+0°1	Lahore.
119°2	72°9	93°8	+2°7	105°7	73°9	83°8	+0°3	103°2	57°9	81°0	−2°1	97°2	52°9	74°0	+1°3	85°7	32°4	60°6	−0°5	74°2	32°9	54°1	+0°9	Peshawar.
75°7	56°7	64°9	−0°1	72°7	56°7	64°1	−0°1	72°2	51°2	62°1	−0°7	71°7	45°7	59°3	+0°7	66°7	30°7	50°1	−1°9	66°2	31°7	47°3	+0°2	Chakrata.
97°1	69°6	80°0	+1°4	88°6	69°6	76°5	−0°6	94°1	65°1	77°2	−0°6	93°1	54°6	76°8	+1°1	90°1	43°1	68°3	−0°3	84°1	43°1	64°1	−0°2	Indore.
104°3	72°4	85°6	+0°9	93°8	72°4	81°9	−0°3	101°3	62°4	81°1	−2°3	101°8	55°9	80°4	−1°5	98°3	43°9	73°2	−1°4	92°8	44°4	69°0	−0°1	Deesa.
92°0	78°0	85°8	+2°1	89°5	77°0	83°4	+2°7	88°0	69°9	80°9	+0°5	95°5	69°5	80°6	+1°5	89°0	57°0	75°4	+0°6	83°0	55°0	69°2	−0°2	Karachi.
89°0	74°5	82°0	+1°1	87°0	75°5	80°9	+0°5	90°0	74°5	81°9	+1°4	92°5	72°0	83°1	+1°1	92°5	69°5	80°6	+0°5	87°0	67°5	77°7	+0°5	Bombay.
80°3	63°0	71°1	−0°1	79°3	65°0	71°0	−0°2	85°3	59°5	72°6	+0°5	86°3	57°0	74°0	−0°1	84°8	53°0	70°5	−1°1	84°8	53°5	69°2	−0°7	Belgaum.
100°6	71°8	82°8	+1°4	93°6	71°8	80°2	−0°7	94°6	68°8	81°5	−0°1	94°6	57°8	79°7	+0°5	90°6	44°3	72°3	−0°4	86°1	45°8	66°8	−1°0	Nagpur.
98°0	71°8	82°9	+0°2	98°0	71°3	82°2	−0°1	98°0	69°8	82°1	+0°4	95°0	63°3	80°9	+0°5	91°0	59°3	76°2	0	89°0	55°3	72°6	−0°7	Bellary.
89°8	63°3	73°7	−0°1	87°8	63°8	73°9	+0°2	86°3	62°8	74°4	+0°8	84°8	56°3	73°3	0	82°8	55°3	70°5	−0°1	83°3	52°8	67°8	−0°5	Bangalore.
103°0	75°0	88°3	+1°1	102°0	71°5	86°9	+1°3	99°5	71°0	86°5	+1°5	98°5	68°5	83°0	+1°0	92°0	67°5	79°0	+0°3	85°0	64°0	75°8	−0°7	Madras.
89°5	72°0	80°5	−0°1	89°0	73°0	80°1	−0°3	91°0	73°5	81°6	+0°8	90°5	73°5	81°7	+0°1	91°0	70°0	80°0	+0°1	89°0	60°0	76°1	−1°3	Rangoon.
89°9	75°0	81°1	+0°1	87°9	75°5	81°2	+0°3	90°9	71°0	82°5	+0°1	89°4	71°5	80°7	−1°5	89°9	64°0	77°9	−0°3	80°9	57°5	70°5	−2°3	Akyab.

B.—Monthly and Annual rainfall and its departure from the average at thirty-three stations in India during 1912.

Station.	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.		JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.		TOTAL.			
	Actual.		Departure.		Actual.		Departure.		Actual.		Departure.		Actual.		Departure.		Actual.		Departure.		Actual.		Departure.		Actual.		Departure.	
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	
Calcutta (Alipore)	0	—0'41	0'74	—0'41	4'09	+2'84	2'46	+0'71	4'84	—0'90	9'53	—1'90	11'48	—1'41	10'95	—1'21	5'11	—5'24	4'28	+0'37	3'34	+2'78	0	—0'21	56'82	—4'99		
Narayanganj	0	—0'34	0'73	—0'59	2'21	—0'36	11'61	+6'66	8'20	—0'74	12'40	—0'22	12'33	—0'13	13'31	+1'14	8'61	—0'76	11'10	+6'52	4'68	+3'72	0	—0'17	85'18	+14'73		
Chittagong	0	—0'34	0'59	—0'39	6'88	+4'20	9'61	+4'85	11'16	+1'85	22'41	+2'02	11'59	—9'75	16'72	—1'25	12'08	+0'45	7'32	+1'10	5'19	+3'37	0	—0'79	103'55	+5'32		
Sibsagar	1'39	+0'06	2'95	+1'09	3'30	—1'61	8'05	—2'17	11'35	—0'42	12'88	—1'32	27'06	+10'42	11'97	—4'98	11'79	—0'07	4'83	—0'14	1'38	+0'31	0'27	—0'22	97'22	+0'95		
Silchar	0'14	—0'69	4'99	+2'95	11'22	+3'38	14'35	—0'27	13'93	—1'29	22'95	+0'68	22'76	+3'64	14'65	—5'72	8'88	—5'05	10'94	+4'45	2'48	+1'08	0'18	—0'25	127'47	+2'91		
Cuttack	0	—0'25	1'54	+0'94	0'28	—0'75	0'75	—0'43	1'18	—2'81	7'78	—2'06	10'21	—1'43	13'65	—0'41	8'00	—2'09	6'58	+1'59	3'99	+2'71	0	—0'35	53'96	—5'34		
Hazaribagh	0'37	—0'40	0'24	—0'83	0'20	—0'81	0'38	—0'16	2'70	+0'51	5'71	—2'58	13'76	+0'46	15'14	+2'40	2'59	—6'45	0'18	—2'65	2'74	+2'49	0	—0'22	44'01	—8'24		
Patna	0'12	—0'49	0'13	—0'58	0'92	+0'46	0'21	—0'11	0'56	—1'10	3'22	—4'65	14'31	+2'10	9'22	—3'66	3'52	—3'77	0'44	—2'32	2'78	+2'61	0	—0'09	35'43	—1'60		
Darjeeling	0'16	—0'48	1'21	+0'22	1'42	—0'35	7'63	+3'97	3'79	—4'95	19'82	—2'95	34'38	+2'01	23'31	—3'29	15'93	—2'53	6'34	+1'85	14'68	+14'39	0'10	—0'12	128'77	+7'77		
Allahabad	0'06	—0'76	0'02	—0'48	0'21	—0'01	0	—0'16	0'11	—0'15	1'58	—3'34	10'47	—1'29	9'12	—2'91	5'21	—0'18	0	—2'52	1'61	+1'30	0'03	—0'24	28'42	—10'74		
Lucknow	0'65	—0'19	0'21	—0'36	0'91	+0'62	0'52	+0'23	0'36	—0'52	2'58	—2'07	10'16	—1'69	6'41	—4'86	5'33	—0'43	0	—1'20	2'01	+1'91	0	—0'35	29'14	—8'91		
Meerut	2'13	+0'96	0'66	—0'27	0'77	+0'22	0'45	+0'12	0'28	—0'30	0'97	—2'27	9'34	+0'05	9'26	—0'03	11'10	+5'38	0	—0'56	0'14	+0'02	0'03	—0'46	35'13	+2'86		
Delhi	1'78	+0'71	0'88	+0'22	0'15	—0'32	1'10	+0'72	0'58	—0'05	1'45	—1'65	6'62	—1'44	9'48	+1'60	11'35	+6'95	0	—0'29	0	—0'10	0'04	—0'44	33'43	+5'91		
Agra	1'28	+0'74	0'12	—0'25	0'55	+0'29	0'05	—0'20	0'03	—0'45	0'48	—2'03	7'45	—2'12	8'72	+0'46	6'99	—0'43	0	—0'83	0'17	+0'10	0'07	—0'26	25'91	—1'41		
Jhansi	0'07	—0'61	0'08	—0'37	0'01	—0'26	0	—0'17	0'01	—0'34	1'52	—3'35	16'32	+4'41	6'83	—4'80	9'26	+3'12	0	—0'72	0'62	+0'51	0'23	—0'04	34'95	—2'62		
Ajmer	0'21	—0'18	0'02	—0'26	0'05	—0'13	0'06	—0'14	0'06	—0'49	1'32	—0'91	5'57	—1'41	5'26	—1'79	0'62	—1'95	0'32	+0'10	0'38	+0'22	0	—0'28	13'87	—7'22		
Saugor	0'02	—0'58	0'74	+0'33	0	—0'31	0'02	—0'35	0	—0'46	0'88	—6'05	12'74	—1'82	12'88	—0'49	5'36	—1'96	0	—0'99	3'05	+2'65	0'05	—0'48	35'74	—10'51		
Jubbulpore	0'08	—0'67	2'57	+1'88	0	—0'41	0'02	—0'25	0'02	—0'47	1'54	—6'15	13'45	—4'99	13'90	—2'64	11'47	+3'61	0	—1'63	2'23	+1'80	0'04	—0'27	45'32	—10'19		
Multan	2'38	+1'99	0'07	—0'33	0	—0'38	1'00	+0'80	0'55	+0'26	0'53	—0'06	1'44	—0'60	2'51	+0'77	0'02	—0'34	0	—0'01	0	—0'08	0	—0'25	8'50	+1'77		
Lahore	2'24	+1'18	0	—0'99	0'37	—0'39	1'34	+0'84	0'10	—0'57	0'64	—1'20	1'65	—3'84	8'00	+2'70	0	—2'47	0	—0'16	0'19	+0'14	0'17	—0'23	14'70	—4'99		
Peshawar	1'74	+0'10	1'72	+0'41	0'10	—2'03	2'95	+1'17	0'61	—0'32	0'79	+0'47	0'28	—1'14	2'18	+0'10	0'16	—0'59	0'26	+0'14	0	—0'32	0'06	—0'43	10'85	—2'44		
Chakrata	7'42	+3'23	0'86	—3'73	1'72	—0'91	2'70	+1'11	2'21	—0'25	2'63	—5'16	26'73	+6'51	23'74	+3'76	10'93	+4'58	0	—0'82	1'74	+1'31	0'66	—0'73	81'34	+8'50		
Indore	0	—0'14	0'22	+0'05	0	—0'04	0	—0'14	0'11	—0'36	2'67	—2'97	13'63	+3'79	7'52	—0'15	1'60	—5'45	0'30	—0'78	3'63	+3'33	0	—0'25	29'68	—3'11		
Deesa	0	—0'13	0	—0'16	0	—0'04	0	—0'03	0	—0'19	1'85	—0'07	8'57	—1'04	8'79	+0'78	2'14	—1'48	2'14	+1'93	0'31	+0'19	0	—0'06	23'80	—0'30		
Karachi	0	—0'62	0	—0'41	0	—0'22	0	—0'16	0	—0'06	0	—0'98	2'77	—0'35	0'38	—1'21	0'02	—0'42	0	0	0	—0'05	0	—0'13	3'17	—4'61		
Bombay	0	—0'09	0	—0'03	0	—0'02	0	—0'06	0'43	—0'28	10'79	—7'69	25'40	+0'23	9'90	—4'29	3'26	—7'58	0'65	—1'19	3'62	+3'24	0	—0'07	54'05	—17'83		
Belgaum	0	—0'10	0	—0'03	0	—0'34	1'37	—0'37	2'41	—0'04	3'63	—4'75	40'86	+24'89	13'86	+4'63	5'28	+0'69	3'20	—1'83	1'20	—0'27	0	—0'34	71'81	+22'14		
Nagpur	0	—0'34	4'58	+4'15	0	—0'50	1'23	+0'67	0'26	—0'49	0'81	—7'90	20'52	+6'14	20'53	+8'77	3'60	—4'97	0	—1'92	0'52	—0'16	0'22	—0'34	52'27	+3'11		
Bellary	0	—0'11	0'25	+0'17	0	—0'19	0'75	—0'10	0'20	—1'84	0'98	—1'06	1'36	—0'35	4'35	+1'99	4'92	+0'38	6'65	+2'67	3'14	+1'18	0	—0'12	22'60	+2'62		
Bangalore	0	—0'27	0'18	0	1'56	+1'10	0'05	—1'32	1'44	—2'90	3'78	+0'91	4'15	—0'02	5'86	+0'37	18'75	+11'99	5'91	—0'37	1'42	—1'41	0'01	—0'48	43'11	+7'60		
Madras	2'83	+1'92	0	—0'33	0	—0'18	0	—0'61	0	—1'08	1'78	—0'12	2'08	—2'01	5'53	+0'59	1'36	—3'78	11'00	—0'27	21'81	+9'03	0'30	—5'94	46'69	—2'78		
Rangoon	5'55	+5'46	0	—0'28	0	—0'37	0	—1'58	9'90	—2'33	18'21	+0'64	21'21	+0'28	20'03	+0'36	14'99	—0'64	4'99	—1'76	4'55	+2'17	0	—0'15	99'43	+1'80		
Akyab	0'39	+0'32	0'59	+0'47	0'10	—0'48	0'71	—0'99	26'18	+14'56	50'75	+5'69	64'26	+11'49	48'99	+5'78	14'43	—7'28	22'63	+12'74	6'87	+2'89	0	—0'73	235'90	+44'46		

C.—*Births.*

Province.	Population under registration.	RATIO OF BIRTHS PER 1,000 OF POPULATION.			Number of males born to every 100 females.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of population.
		Maximum for any one district.	Minimum for any one district.	Mean for the province.			
Delhi	393,356	...	...	46·03	101·57	6·77	...
Bengal	45,329,247	44·41	21·67	35·30	106	5·53	...
Bihar and Orissa	34,290,633	49·64	31·60	42·52	104	11·51	...
Assam	6,051,507	38·77	27·71	32·16	107	7·12	...
United Provinces of Agra and Oudh.	46,835,108	55·34	26·61	45·38	108·41	15·47	...
Punjab	19,337,146	53·1	20·2	45·3	109·6	18·7	...
North-West Frontier Province	2,041,077	42·5	31·5	37·1	123·0	9·2	...
Central Provinces and Berar	13,916,308	55·08	45·01	48·24	104·56	5·90	...
Madras Presidency	40,347,357	39·0	18·2	30·9	104·8	6·6	...
Coorg	174,976	37·52	19·36	26·32	107·29	...	12·04
Bombay Presidency	19,587,383	49·03	16·54	34·97	108·18	·09	...
Burma... { Lower	6,382,847	43·57	18·25	31·68	108	6	...
{ Upper	3,473,006	38·85	26·29	32·96	105	4	...
Ajmer-Merwara	501,395	52·14	45·47	47·08	123·10	8·84	...

D.—*Deaths.*

Province.	Population under registration.	Area in square miles.	Average population per square mile.	RATIO OF DEATHS PER 1,000 OF POPULATION.			DEATH RATE BY SEX.	
				Maximum for any one district.	Minimum for any one district.	Mean for the province.	Male.	Female.
Delhi	393,356	*682	*33,599	...	...	39·26	35·98	43·35
Bengal	45,329,247	70,873	639	43·36	20·06	29·77	30·35	29·17
Bihar and Orissa	34,290,633	81,524	420	39·98	19·98	31·01	32·87	29·22
Assam	6,051,507	33,551	180	38·51	20·83	25·04	25·37	24·69
United Provinces of Agra and Oudh.	46,835,108	106,402	440	47·55	20·87	29·91	29·97	29·85
Punjab	19,337,146	96,654	200	33·8	19·8	26·6	25·4	28·1
North-West Frontier Province.	2,041,077	13,399	152	27·2	20·3	23·4	23·5	23·2
Central Provinces and Berar.	13,916,308	99,803	139	66·46	27·29	42·34	44·41	40·30
Madras Presidency	40,347,357	129,870	311	39·2	16·4	24·3	25·2	23·5
Coorg	174,976	1,582	111	51·66	31·51	38·37	36·40	40·83
Bombay Presidency	19,587,383	122,978	159	49·79	12·64	34·88	34·48	35·32
Burma { Lower	6,382,847	75,866	84	36·77	19·88	26·00	27·13	24·73
{ Upper	3,473,006	35,792	97	47·18	23·01	28·95	30·23	27·76
Ajmer-Merwara	501,395	2,711	176	40·33	37·59	38·25	37·62	38·96

E.—*Total number of deaths by months.*

Province.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	RATIO PER 1,000 OF POPULATION.		
														1912.	1911.	
Delhi ...	1,493	1,177	915	1,135	1,430	1,385	1,102	1,025	1,480	1,363	1,543	1,395	15,443	39'26	...	
Bengal ...	138,528	94,121	104,410	138,371	97,097	82,040	91,829	79,508	101,266	111,283	132,258	179,068	1,349,779	29'77	26'94	
Bihar & Orissa	94,962	76,554	92,493	101,236	108,201	99,165	82,847	82,893	87,389	78,088	74,330	85,270	1,063,428	31'01	35'12	
Assam ...	12,395	9,609	10,080	11,934	14,364	15,191	13,276	11,586	11,899	12,883	13,237	15,112	151,566	25'04	23'61	
United Provinces of Agra and Oudh.	133,868	125,011	144,793	141,916	131,048	123,768	95,201	88,128	101,608	102,388	93,880	119,198	1,400,807	29'91	44'95	
Punjab ...	37,223	34,222	43,668	50,167	50,901	43,121	39,236	35,330	40,207	42,639	45,173	53,149	515,036	26'63	34'05	
North-West Frontier Province.	3,633	3,630	3,607	3,375	3,681	4,027	4,192	4,307	4,151	3,845	4,448	4,853	47,749	23'39	23'30	
Central Provinces and Berar.	42,821	36,813	42,876	37,841	50,138	43,730	35,789	55,399	82,320	72,951	48,086	40,521	589,285	42'34	34'67	
Madras Presidency.	105,093	69,745	67,006	61,394	72,997	76,723	83,861	94,266	85,708	80,624	83,467	101,424	982,308	24'3	23'1	
Coorg ...	470	357	440	433	654	990	804	716	544	442	427	436	6,713	38'37	32'55	
Bombay Presidency.	53,872	43,738	49,044	50,324	55,976	60,433	72,538	77,561	65,689	57,226	50,898	45,911	683,210	34'88	28'35	
Burma {	Lower	12,401	12,261	11,556	12,984	12,908	14,130	16,999	16,868	15,001	13,015	13,186	14,644	165,953	26'00	23'99
	Upper	8,032	6,725	7,491	7,574	7,144	7,555	8,962	9,041	8,211	8,586	9,536	11,679	100,536	28'95	27'07
Ajmer-Merwara.	1,683	1,820	2,504	1,772	1,662	1,190	960	1,742	2,068	1,387	1,169	1,221	19,178	38'25	44'41	
Total ...	646,474	515,783	580,883	620,436	608,201	573,448	547,596	558,370	607,541	586,720	571,638	673,881	7,090,991	29'71	32'01	

F.—*Ratio of deaths from all causes according to months.*

Province.		ANNUAL* DEATH RATE PER MILE FOR THE MONTH OF												Ratio for the year.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Delhi ...	...	44'69	37'66	27'39	35'11	42'80	42'84	32'99	30'68	45'77	40'80	47'73	41'76	39'26
Bengal	...	35'98	26'13	27'12	37'14	25'22	22'02	23'85	20'65	27'18	28'91	35'50	46'51	29'77
Bihar and Orissa	...	32'61	28'10	31'76	35'92	37'15	35'18	28'45	28'46	31'01	26'81	26'37	29'28	31'01
Assam	...	24'12	19'99	19'61	23'99	27'95	30'54	25'83	22'54	23'92	25'07	26'61	29'40	25'04
United Provinces of Agra and Oudh	...	33'65	33'59	36'40	36'87	32'95	32'15	23'93	22'16	26'40	25'74	24'39	29'97	29'91
Punjab	...	22'66	22'27	26'59	31'56	30'99	27'13	23'89	21'51	25'30	25'96	28'42	32'36	26'63
North-West Frontier Province	...	20'96	22'38	20'81	20'12	21'23	24'00	24'18	24'85	24'74	22'18	26'51	28'00	23'39
Central Provinces and Berar	...	36'23	33'29	36'28	33'08	42'42	38'23	30'28	46'87	71'97	61'72	42'04	34'28	42'34
Madras Presidency	...	30'67	21'76	19'55	18'51	21'30	23'14	24'47	27'51	25'85	23'53	25'17	29'60	24'3
Coorg	...	31'63	25'68	29'61	30'11	44'01	68'84	54'10	48'18	37'83	29'74	29'69	29'34	38'37
Bombay Presidency	...	32'38	28'10	29'48	31'26	33'65	37'54	43'60	46'62	40'80	34'40	31'62	27'60	34'88
Burma {	Lower	22'88	24'18	21'32	24'75	23'81	26'93	31'36	31'12	28'59	24'01	25'13	27'01	26'00
	Upper	27'23	24'37	25'40	26'53	24'22	26'47	30'38	30'65	28'76	29'11	33'41	39'59	28'95
Ajmer-Merwara	...	39'52	45'69	58'80	43'00	39'03	28'88	22'54	40'91	50'18	32'57	28'37	28'67	38'25
India	...	31'89	27'20	28'66	31'63	30'01	29'23	27'02	27'55	30'97	28'95	29'14	33'25	29'71

* The ratios in this statement have been calculated with reference to the number of days in each month.

G.—Deaths according to age.

Province.	RATIO PER 1,000 OF POPULATION.																			
	Under one year.*		1—5 years.		5—10 years.		10—15 years.		15—20 years.		20—30 years.		30—40 years.		40—50 years.		50—60 years.		60 years and upwards.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Delhi ...	282'14	263'42							Information not available.											
Bengal ...	220'63	203'45	43'13	37'83	16'02	12'92	10'82	9'86	14'51	16'71	15'54	18'63	18'79	20'23	24'64	22'78	39'62	36'94	75'32	64'47
Bihar and Orissa.	188'34	170'94	51'96	45'50	16'55	14'82	13'52	12'47	13'99	12'85	17'40	15'44	19'52	17'12	25'40	20'13	39'25	33'94	78'85	64'05
Assam ...	205'61	187'11	33'14	29'89	12'36	10'14	10'67	9'62	13'30	16'52	13'19	17'26	16'56	19'28	22'37	22'05	34'81	31'29	54'17	43'44
United Provinces of Agra and Oudh.	213'73	198'74	50'06	48'44	10'77	11'08	9'14	10'49	10'39	13'09	13'72	15'20	16'24	16'26	22'88	20'46	36'66	32'63	63'13	55'60
Punjab ...	195'10	194'57	44'32	45'00	9'36	10'36	7'51	10'38	7'85	10'66	8'84	11'52	10'80	13'34	15'29	14'93	22'73	21'98	60'05	62'86
North-West Frontier Province.	171'80	162'53	45'4	41'5	10'7	10'8	7'9	10'4	9'0	10'3	9'8	10'8	11'2	13'6	15'3	16'8	23'3	23'1	47'9	46'3
Central Provinces and Berar.	312'23	274'13	84'13	71'02	17'76	15'74	11'28	11'97	14'36	15'96	14'59	15'98	17'13	17'09	24'40	20'17	40'56	35'01	92'23	80'66
Madras Presidency.	199'78	180'55	34'6	32'9	10'6	9'8	7'3	7'1	10'2	12'7	11'5	12'4	14'7	13'4	19'5	15'3	30'4	25'3	70'9	69'0
Coorg ...	277'57	283'21	60'46	57'81	16'73	13'97	9'58	13'08	13'93	16'89	19'05	30'95	33'02	32'75	44'59	43'62	59'72	54'35	101'73	108'97
Bombay Presidency.	225'81	211'01	70'81	69'53	16'13	16'67	10'54	12'87	13'34	17'15	14'61	17'71	18'17	18'73	27'27	20'99	42'61	35'79	100'19	96'94
Burma { Lower	236'69	198'37	...	70'72	13'99	12'32	9'40	8'87	13'43	10'83	14'92	...	...	14'70	25'18	...	...	20'93	66'98	67'23
Upper	262'53	227'92	...	80'31	13'94	11'43	8'51	7'52	11'71	10'04	13'43	...	...	14'73	23'59	...	...	20'30	77'52	72'66
Ajmer-Merwara.	Information not available.																			
Total ...	216'01	198'71	50'87	44'48	13'56	12'49	9'87	10'15	11'98	14'05	13'34	16'00	17'47	15'88	22'01	20'12	36'76	29'46	72'69	66'57

* Calculated on the number of births during 1912.

H.—Deaths in Towns and Rural Circles compared.

Province.	NUMBER OF REGISTRATION CIRCLES.			POPULATION.			RATIO OF DEATHS PER 1,000 OF POPULATION.		
	Rural.	Town.	Total.	Rural.	Town.	Total.	Rural.	Town.	Total.
Delhi ...	6	1	7	164,212	229,144	393,356	33'01	43'74	39'26
Bengal ...	375	112	487	42,421,996	2,907,251	45,329,247	30'14	24'47	29'77
Bihar and Orissa ...	227	55	282	33,093,280	1,197,353	34,290,633	31'04	29'97	31'01
Assam ...	76	19	95	5,931,275	120,232	6,051,507	25'13	20'80	25'04
United Provinces of Agra and Oudh.	1,076	93	1,169	43,799,642	3,035,466	46,835,108	29'56	34'36	29'91
Punjab ...	403	129	532	17,631,633	1,705,513	19,337,146	26'12	31'94	26'63
North-West Frontier Province.	52	13	65	1,849,832	191,245	2,041,077	23'46	22'73	23'39
Central Provinces and Berar.	290	104	394	12,691,981	1,224,327	13,916,308	41'84	47'60	42'34
Madras Presidency...	231	269	500	35,516,696	4,830,661	40,347,357	23'8	28'6	24'3
Coorg ...	8	2	10	164,995	9,981	174,976	36'81	64'12	38'37
Bombay Presidency	228	65	293	16,850,573	2,736,810	19,587,383	33'80	41'48	34'88
Burma { Lower	228	41	269	5,580,530	802,317	6,382,847	24'38	37'23	26'00
Upper	122	18	140	3,177,526	295,480	3,473,006	27'54	44'05	28'95
Ajmer-Merwara ...	not available		23	not available		501,395	not available		38'25

I.—Deaths from cholera in the different provinces in India from 1881 to 1912.

YEAR.	Delhi.	* Bengal.	Bihar and Orissa.	Assam.	United Provinces of Agra and Oudh.	Punjab.	(a) N.-W. Frontier Province.	Central Provinces.	Berar.	Madras.	Coorg.	Bombay.	Lower Burma.	Upper Burma. †	Ajmer-Merwara.	Rajputana.	Central India.	Hyderabad (cantonnement stations).	Mysore.
1881	79,180	...	5,010	25,865	5,207	...	9,140	3,404	9,446	3	16,694	5,239	...	16	197	581	1,721	25
1882	182,352	...	21,055	89,372	39	...	11,932	3,573	23,604	31	7,904	7,177	...	289	1,327	1,562	150	893
1883	90,439	...	14,908	18,160	190	...	16,235	27,897	36,284	...	37,954	2,185	...	87	797	1,740	1,947	124
1884	134,421	...	22,276	30,143	614	...	149	87	75,476	...	13,804	5,515	...	227	1,297	1,018	2,479	330
1885	173,767	...	7,753	63,457	1,936	...	21,868	3,683	58,109	...	37,287	7,685	...	100	1,615	4,624	1,387	2,677
1886	118,368	...	20,188	34,565	12	...	16,679	976	12,417	...	167	4,027	...	765	173	290	499	10
1887	172,578	...	7,941	200,628	8,804	...	12,576	14,396	28,359	3	25,711	2,649	...	384	2,612	8,868	2,831	832
1888	111,391	...	9,693	18,704	14,938	...	921	305	58,677	2	36,500	15,982	...	13	32	191	2,057	1,015
1889	171,103	...	18,288	48,494	2,838	...	52,588	10,925	76,020	9	32,431	3,240	...	55	6,923	3,344	1,128	1,590
1890	145,885	...	15,396	80,295	3,401	...	4,787	847	35,288	5	3,259	1,076	...	408	2,746	3,132	...	1,326
1891	229,575	...	23,882	169,013	10,107	...	21,312	7,958	98,773	7	17,850	2,400	...	532	2,946	13,474	3,102	1,204
1892	259,398	...	21,552	194,886	75,959	...	39,972	2,030	79,033	58	42,900	6,208	...	2,352	26,760	8,384	53	5,497
1893	126,976	...	21,849	12,154	639	...	557	1,198	32,209	9	18,853	2,393	...	3	314	127	165	680
1894	236,150	...	13,497	178,079	113	...	7,043	3,452	42,289	8	33,588	7,428	...	...	2	5,210	1,862	328
1895	177,087	...	18,962	51,562	549	...	15,506	11,919	21,172	...	8,890	5,150	...	289	1,049	6,043	467	2,334
1896	226,824	...	17,042	69,147	5,146	...	52,985	12,264	47,847	49	35,104	2,559	...	12	3,797	15,766	525	2,100
1897	196,247	...	33,240	44,208	622	...	57,131	10,122	143,445	106	57,109	8,538	...	19	1,496	13,202	1,039	4,248
1898	65,020	...	11,149	2,508	338	...	7	...	65,444	8	4,368	2,972	...	1	6	2	6	1,193
1899	107,678	...	8,380	8,142	1,816	...	7611	541	29,082	...	8,579	4,942	2,050	1	498	...	...	123
1900	345,878	...	23,761	84,960	28,260	...	63,114	18,375	60,662	...	163,889	3,440	41	4,842	28,719	20,450	3,813	779
1901	110,753	...	7,468	53,995	180	117	49	17	81,370	58	13,600	3,552	†	50	6	72	1	11,351
1902	150,971	...	12,658	25,160	371	...	28	16	29,769	...	3,230	1,844	57	32	1,519	12	...	218
1903	203,405	...	8,360	47,159	14,688	1,354	437	...	27,393	...	1,825	5,346	2,887	...	236	1,110	...	98
1904	137,701	...	5,588	6,617	716	1	2,967	...	23,109	...	13,156	2,472	508	...	1	150	...	471
1905	146,339	...	142,312**	121,790	2,197	300	1,217	...	16,888	...	5,396	3,511	1,836	...	3	27	64	626
1906	192,596	...	108,278	149,549	4,232	...	38,768	...	142,811	10	46,119	5,529	2,343	284	4,714	10,147	1,061	7,223
1907	205,702	...	77,181	22,438	437	266	4,291	...	81,565	187	7,656	7,964	414	1	64	413	1	4,972
1908	268,908	...	59,329	83,544	12,297	2,45	9,048	...	141,970	114	1,759	9,336	2,575	...	737	1,730	937	2,449
1909	56,711	...	71,737	21,823	1,513	134	7,687	...	39,424	99	28,714	4,941	7,348	...	403	1,421	164	1,629
1910	162,611	...	117,969	102,402	2,131	1,605	5,316	...	32,594	56	3,694	1,834	177	2	8	2,864	2	1,812
1911	124,560	...	35,248	117,689	1,260	12	2,998	...	58,174	6	5,817	2,595	1,596	50	85	1,054	803	210
1912	406	95,467	77,023	(b) 14,303	18,894	1,833	1,329	34,313	...	92,497	...	64,505	6,013	1,173	13	414	9,080	1,190	6,748

* Excluding Calcutta from 1881 to 1892.
† Statistics from 1881 to 1898 not available.
‡ Statistics not available.
§ Including 30 deaths in cantonments.

|| Excluding Zamindaris.
||| Including Berar from 1903.
** Eastern Bengal and Assam.
(a) 1881-1900 included in the Punjab.
(b) Assam only.

J.—Deaths from cholera in British Provinces, by months, during the year 1912.

Province.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	RATIO PER 1,000 OF POPULATION.	
														1912.	1911.
Delhi ...	...	...	...	7	178	63	44	47	61	6	...	...	406	1'03	...
Bengal ...	10,558	8,991	14,014	20,936	9,709	3,142	2,080	1,767	2,470	2,140	6,995	12,665	95,467	2'10	1'49
Bihar and Orissa.	591	644	2,000	3,740	24,065	21,933	7,059	8,516	4,743	1,885	999	848	77,023	2'24	...
Assam ...	605	297	787	1,644	2,235	2,416	1,148	536	663	1,039	1,396	1,537	14,303	2'36	...
United Provinces of Agra and Oudh.	260	187	460	3,523	4,844	2,589	370	1,500	2,568	1,880	601	112	18,894	'40	2'51
Punjab ...	...	2	4	11	84	256	272	263	730	198	8	5	1,833	'09	'06
North-West Frontier Province.	...	...	...	...	...	5	274	452	561	35	1	1	1,329	'65	'01
Central Provinces and Berar.	41	30	116	214	1,239	1,863	1,421	8,432	15,247	5,260	376	74	34,313	2'46	'22
Madras Presidency.	15,041	4,291	3,922	2,950	5,218	7,085	8,182	14,390	8,902	5,713	6,458	10,345	92,497	2'3	1'4
Coorg ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	'03
Bombay Presidency.	280	273	494	2,706	6,237	13,323	19,224	14,386	4,717	1,891	423	551	64,505	3'29	'30
Burma { Lower	404	337	240	443	409	576	1,122	920	484	287	308	483	6,013	'94	'41
Upper	42	1	10	20	1	31	44	104	147	251	300	222	1,173	'34	'46
Ajmer-Merwara.	...	...	...	...	...	...	...	7	6	...	...	...	13	'03	'10
Total ...	27,822	15,053	22,047	36,194	54,219	53,282	41,240	51,320	41,299	20,585	17,865	26,843	407,769	1'71	1'48

K.—Details of the distribution and occurrence of Cholera during the year 1912.

Province.	Mortality in 1912.	Mean mortality of previous 5 years.	Urban mortality.	Rural mortality.	Percentage of villages attacked.	Maximum mortality in any one district excluding towns.	Maximum mortality in any one town.	Month of maximum mortality.
Delhi ...	1'03	'05	'45	1'85	6'78	..	...	May.
Bengal ...	2'10	2'45	2'55	2'07	12'67	6'61	10'80	April.
Bihar and Orissa	2'24	3'17	2'86	2'22	6'62	7'10	32'83	May.
Assam ...	2'36	2'68	2'13	2'37	9'35	6'41	10'67	June.
United Provinces of Agra and Oudh ...	'40	1'47	'49	'40	3'19	2'79	6'59	May.
Punjab ...	'09	'18	'28	'08	'73	'44	11'07	September.
North-West Frontier Province	'65	'48	'92	'62	5'56	'96	21'40	September.
Central Provinces and Berar	2'46	'42	2'81	2'43	8'16	14'66	32'63	September.
Madras Presidency	2'3	1'9	2'4	2'3	19'43	9'0	23'0	January.
Coorg ...	..	'53	...	...	...	...	...	...
Bombay Presidency	3'29	'51	2'19	3'47	19'14	9'15	28'13	July.
Burma { Lower	'94	'90	2'06	'78	4'56	3'36	22'57	July.
Upper	'34	'79	1'16	'26	2'94	'87	5'64	November.
Ajmer-Merwara	'03	'02	Not available.		'27	Not available.		August.

L.—Small-pox mortality—1912.

Provinces, Districts, Towns.	Delhi.	Bengal.	Bihar and Orissa.	Assam.	United Provinces of Agra and Oudh.	Punjab.	North-West Frontier Province.	Central Provinces and Berar.	Madras Presidency.	Coorg.	Bombay Presidency.	Lower Burma.	Upper Burma.	Ajmer-Merwara.	Registration India.
I.—Mortality by Provinces :—															
A.—Deaths by months—															
January	273	525	120	246	71	1,091	112	335	1,959	13	684	454	27	402	6,312
February	109	580	155	321	65	1,005	100	604	1,832	8	817	837	40	585	7,058
March	25	816	307	459	218	1,545	84	611	1,798	16	1,099	974	124	1,027	9,103
April	31	1,729	528	725	458	2,515	107	744	1,545	12	1,086	1,178	428	640	11,726
May	21	1,254	402	797	475	3,112	82	640	1,420	...	767	1,126	647	280	11,023
June	21	885	295	620	585	3,246	94	436	1,140	3	577	701	312	61	8,976
July	12	813	140	445	400	3,305	116	381	1,069	...	332	382	138	25	7,558
August	3	359	72	206	170	1,708	150	234	1,062	...	194	129	61	10	4,358
September	2	318	63	246	58	857	121	149	1,074	1	100	100	12	1	3,102
October	7	245	76	117	33	1,181	267	102	931	...	108	69	3	2	3,146
November	4	228	83	174	147	3,307	349	92	952	...	179	92	11	5	5,628
December	9	535	111	340	416	7,467	435	228	1,312	...	388	75	39	12	11,367
Total	517	8,287	2,357	4,696	3,101	30,339	2,017	4,556	16,094	53	6,331	6,117	1,842	3,050	89,357
B.—Annual death ratios :—															
Ratio per 1,000 of population, 1912.	1'31	'18	'06	'77	'07	1'57	'99	'33	'4	'30	'32	'96	'53	6'08	'37
Ratio per 1,000 of population, 1911.	...	'17	'09	'29	'03	'25	'47	'12	'6	1'70	'24	'88	'10	3'00	'25
Difference ... ..	...	+ '01	— '03	+ '48	+ '04	+ 1'32	+ '52	+ '21	— '2	— 1'40	+ '08	+ '08	+ '43	+ 3'08	+ '12
Mean ratio per 1,000 during 1907-1911.	'18	'36	'44	'51	'38	'52	'38	'31	'6	'68	'20	'37	'16	1'15	'42
Difference	+ 1'13	— '18	— '38	+ '26	— '31	+ 1'05	+ '61	+ '02	— '2	— '38	+ '12	+ '59	+ '37	+ 4'93	— '05
II.—District mortality excluding towns :—															
Number of districts affected	...	25	19	8	37	27	5	23	24	4	25	19	11	Not available.	227
Highest district ratio	...	'70	'40	1'89	'61	4'17	1'42	1'06	1'2	'72	1'32	2'75	'77		4'17
Name of that district	...	Mymensingh.	Bhagalpur.	Kamrup.	Malniguri.	Montgomery.	Hazara.	Nagpur.	Coimbatore.	Nanjaraipatna.	Karachi.	Prome.	Minbu.		Montgomery.
Lowest district ratio	...	'002	'002	'006	'01	'14	'12	'01	'05	'11	'06	'01	'05		'002
Name of that district	...	Jalpaiguri.	Shahabad.	Lakhimpur.	Bastl.	Kangra.	Bannu.	Chhindwara.	Vizagapatam.	Padinalnad Taluk.	Ahmednagar.	Mergul.	Lower Chindwin.		Jalpaiguri.
Number of districts without mortality.	...	1	1	...	11	1	...	1	...	1	...	...	...		16
District death rate per 1,000 of population.	...	'18	'06	'77	'05	1'46	'95	'25	'4	'30	'24	'82	'32		'33†
III.—Town mortality :—															
Number of towns affected	...	36	16	7	53	118	8	50	102	1	43	36	15	Not available.	485
Highest town ratio	...	2'84	3'24	2'88	5'01	18'35	11'14	5'58	4'5	'80	8'36	19'12	16'09		19'12
Name of that town	...	Suri.	Sahibganj.	Gauhati.	Ferozeabad.	Pindigheb.	Nowshera Kalan.	Nagpur.	Sattur.	Virajendrapet.	Umarkot.	Nyaunglebin.	Taungwingyi.		Nyaunglebin.
Lowest town ratio	...	'01	'01	'16	'02	'10	'10	'05	'02	...	'03	'03	'05		'01
Name of that town	...	Manik Talla.	Cuttack.	Goalpara.	Fyzabad Ajodhya.	Rohtak.	Kulachi.	Jubbulpore Cantt.	Conjeeveram.	Mercara.	Nasik.	Akyab.	Pakokku.		Manik Talla.
Number of towns without mortality.	...	76	39	12	40	11	5	54	167	1	22	5	3		435
Town death rate per 1,000 of population.	...	'12	'10	'74	'22	2'68	1'36	1'11	'2	'30	'85	1'92	2'75		'71†
IV.—Infantile mortality :—															
Children under one year...	264	1,296	502	770	1,177	9,000	602	1,491	6,313	6	1,647	459	103	1,252	24,882
Children 1—10 years ...	200	2,445	996	1,572	1,538	15,691	1,161	2,218	4,971	8	2,532	1,232	259	1,771*	36,594
Percentage of children in total small-pox mortality.	89'75	45'14	63'56	49'87	87'55	81'38	87'41	81'41	70'11	26'42	66'01	27'64	19'65	99'11	68'80

*Under 12 years.

†Excluding Ajmer-Merwara.

M.—Fever mortality—1912.

Provinces, Districts, Towns.	Delhi.	Bengal.	Bihar and Orissa.	Assam.	United Provinces of Agra and Oudh.	Punjab.	North-West Frontier Province.	Central Provinces and Berar.	Madras Presidency.	Coorg.	Bombay Presidency.	Lower Burma.	Upper Burma.	Ajmer-Merwara.	Registration India.
I.—Mortality by Provinces :—															
A.—Deaths by months.															
January	840	97,301	59,674	6,554	91,848	21,161	2,660	18,974	29,958	375	22,687	3,892	2,504	1,096	359,534
February	725	63,910	41,450	5,165	75,400	18,274	2,631	14,851	21,361	286	19,073	3,831	1,926	1,068	269,951
March	649	67,678	50,445	5,374	87,641	22,034	2,565	18,115	22,055	362	23,106	3,683	2,334	1,267	307,308
April	747	89,334	62,285	5,802	94,886	21,818	2,270	18,727	20,482	360	22,319	4,077	2,419	920	346,446
May	838	66,367	60,089	7,027	97,455	24,919	2,571	27,160	24,323	580	23,265	3,824	1,868	1,187	341,473
June	898	59,803	55,727	7,557	94,791	23,159	2,949	22,822	24,047	888	21,684	4,038	2,205	997	322,165
July	644	67,535	51,098	7,199	70,126	21,346	2,794	17,029	26,280	685	24,062	5,059	2,703	777	297,337
August	616	58,880	48,142	6,539	59,901	18,275	2,675	21,380	28,583	605	23,166	5,076	2,694	1,506	283,038
September	953	76,086	55,144	6,525	68,774	22,603	2,495	31,286	27,773	459	26,961	4,645	2,648	1,838	328,190
October	844	84,145	52,365	6,634	71,797	25,440	2,671	35,144	26,017	367	26,823	4,303	2,900	1,231	340,681
November	995	98,367	52,028	6,459	67,858	26,216	3,120	24,652	25,027	358	25,689	4,815	3,365	1,039	339,988
December	938	129,787	56,479	7,483	87,023	29,195	3,476	20,022	30,555	372	22,486	6,044	5,114	1,000	399,974
Total	9,687	959,193	644,926	78,318	967,500	275,040	32,877	270,162	306,471	5,697	286,321	53,287	32,680	13,926	3,936,085
B.—Annual death ratios :—															
Ratio per 1,000 of population, 1912.	24·63	21·16	18·80	12·94	20·66	14·22	16·11	19·41	7·6	32·56	14·62	8·35	9·41	27·77	16·49
Ratio per 1,000 of population, 1911.	...	19·46	...	...	27·94	15·33	17·48	16·85	7·4	26·03	11·38	7·87	7·42	34·95	17·63
Difference ... ..	...	+1·70	...	...	-7·28	-1·11	-1·37	+2·56	+·2	+6·53	+3·24	+·48	+1·99	-7·18	-1·14
Mean ratio per 1,000 during 1907-1911.	33·08	20·55	22·00	14·66	31·11	21·66	21·12	15·85	7·8	27·75	13·00	9·33	8·28	29·29	20·04
Difference	-8·45	+·61	-3·20	-1·72	-10·45	-7·44	-5·01	+3·56	-·2	+4·81	+1·62	-·98	+1·13	-1·52	-3·55
I.—District mortality excluding Towns :—															
Number of districts affected.	...	26	20	8	48	28	5	24	24	5	25	19	11	...	243
Highest district ratio ...	...	36·44	27·32	27·90	29·12	18·67	18·00	28·83	20·4	48·16	36·52	15·78	19·70	...	48·16
Name of that district ...	...	Malda	Purnea	Goalpara	Bulandshahr.	Mianwali	Peshawar	Hoshangabad.	Vizagapatam.	Padinal-knad Taluk.	Ahmedabad.	Thayetmyo.	Mandalay	...	Padinal-knad Taluk
Lowest district ratio ...	...	11·17	8·10	9·71	14·03	5·36	14·54	8·58	2·2	27·16	5·46	2·35	4·93	...	2·2
Name of that district ...	...	Howrah	Puri	Sylhet	Dehra Dun.	Simla	Bannu	Buldana	Bellary	Yedinal-knad Taluk.	Belgaum	Maubin	Meiktila	...	Bellary
Number of districts without mortality.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
District death rate per 1,000 of population.	...	22·00	19·14	13·03	20·84	14·44	16·64	20·15	7·9	33·48	15·30	8·87	9·93	...	*17·03
II.—Town mortality :—															
Number of towns affected	...	112	55	19	93	129	13	104	260	2	65	41	18	...	911
Highest town ratio ...	...	41·60	33·22	17·02	39·01	27·81	15·02	45·80	21·5	17·51	49·67	16·51	14·84	...	49·67
Name of that town ...	...	Malda	Dumka	North-Lakhimpur.	Shikarpur	Kot Mithan	Nawashahr.	Harda	Mudugula	Virajendrapet.	Umarnkot	Shwegyin.	Sallm	...	Umerkot.
Lowest town ratio ...	...	2·43	1·91	3·42	5·39	2·04	2·62	·50	·2	17·23	1·65	1·80	1·22	...	·2
Name of that town ...	...	Tilthaghar	Daudnagar.	Hallakandi.	Bahraich	Khangah Dogran.	Becketganj Khwajaganj.	Deulgaon	Alyabad	Mercara	Raneben-nur.	Moulmein.	Myingyan.	...	Alyabad.
Number of towns without mortality.	...	...	...	...	...	...	...	...	9	...	...	...	...	...	9
Town death rate per 1,000 of population.	...	8·82	9·47	8·60	17·67	11·95	10·99	11·80	5·3	17·33	10·42	4·70	3·85	...	*10·13

*Excluding Ajmer-Merwara.

N.—*Dysentery and Diarrhœa mortality—1912.*

Provinces, Districts, Towns.	Delhi.	Bengal.	Bihar and Orissa.	Assam.	United Provinces of Agra and Oudh.	Punjab.	North-West Frontier Province.	Central Provinces and Berar.	Madras Presidency.	Coorg.	Bombay Presidency.	Lower Burma.	Upper Burma.	Ajmer-Merwara.	Registration India.
I.—Mortality by Provinces :—															
A.—Deaths by months—															
January	24	2,751	2,269	898	1,125	613	18	2,667	7,279	9	2,862	588	115	22	21,240
February	22	1,893	1,734	632	913	518	9	2,285	5,138	6	2,572	592	122	19	16,455
March	12	1,957	2,193	700	1,151	598	22	3,015	4,601	5	2,945	470	110	34	17,813
April	15	2,540	2,292	941	1,439	722	33	3,126	4,220	3	3,313	703	121	45	19,513
May	13	2,099	2,181	1,302	1,912	980	30	3,905	4,945	25	4,386	852	132	53	22,815
June	18	1,648	1,909	1,675	1,671	761	20	3,244	5,683	51	4,971	1,037	194	33	22,915
July	27	1,758	2,228	1,428	1,309	643	23	3,910	6,727	38	6,896	1,461	343	24	26,815
August	25	1,667	2,720	1,085	1,247	809	25	7,795	7,620	34	8,480	1,277	383	56	33,223
September	25	2,175	2,528	1,120	1,240	1,238	33	11,293	6,450	18	7,288	913	254	110	34,685
October	47	2,419	2,048	1,208	1,049	1,046	22	8,980	5,864	19	5,849	573	180	47	29,351
November	32	2,638	1,720	1,166	942	976	33	5,203	6,129	13	4,057	498	144	40	23,591
December	28	3,790	2,200	1,086	988	881	21	3,402	7,257	10	3,420	499	150	68	23,800
Total	288	27,335	26,022	13,241	14,986	9,785	289	58,825	71,913	231	57,039	9,463	2,248	551	292,216
B.—Annual death ratios—															
Ratio per 1,000 of population, 1912.	*73	*60	*75	*219	*32	*51	*14	4*23	1*8	1*32	2*91	1*48	*65	1*10	1*22
Ratio per 1,000 of population, 1911.	...	*49	...	...	*51	*59	*13	3*15	1*6	*66	1*61	1*27	*71	1*19	1*06
Difference ... ..	...	+*11	...	...	—*19	—*08	+*01	+1*08	+*2	+*66	+1*30	+*21	—*06	—*09	+*16
Mean ratio per 1,000 during 1907-1911.	*70	*49	1*00	2*56	*41	*69	*19	3*13	1*6	1*55	2*23	1*50	*74	1*10	1*14
Difference	+*03	+*11	—*25	—*37	—*09	—*18	—*05	+1*10	+*2	—*23	+*68	—*02	—*09	...	+*08
II.—District mortality excluding towns :—															
Number of districts affected	...	26	20	8	48	28	5	24	24	5	25	19	11	...	243
Highest district ratio ...	...	4*61	4*80	4*97	6*14	3*64	*51	13*32	5*7	1*43	8*06	2*28	*82	...	13*32
Name of that district ...	...	Howrah	Puri	Lakhimpur	Garhwal	Rawalpindi	D.I. Khan	Akola	Nilgiris	Kigga nad Taluk.	Sholapur	Mergui	Pakokku	...	Akola
Lowest district ratio ...	...	*04	*01	*43	*01	*05	*01	*29	*4	*35	*04	*21	*19	...	*01
Name of that district ...	...	Malda	Purnea	Goalpara	Muzaffarnagar	Attock	Kohat	Bhandara	Vizagapatam	Yedenalk nad Taluk.	Larkhana	Toungoo	Yamethin	...	Muzaffarnagar
Number of districts without mortality.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
District death rate per 1,000 of population.	...	*48	*71	2*18	*22	*40	*10	4*17	1*5	*68	2*73	1*22	*55	...	1*08*
III.—Town mortality :—															
Number of towns affected	...	111	49	17	85	122	11	102	243	2	65	39	16	...	862
Highest town ratio ...	...	9*65	8*12	4*53	6*77	9*03	1*70	21*64	11*8	18*86	14*45	5*88	4*19	...	21*64
Name of that town ...	...	Kamarhati.	Puri	Dibrugarh	Saran	Isa Khel	Bannu	Nandura	Palamcottah	Virajendrapet	Poona	Myanaung	Pyinmana	...	Nandura
Lowest town ratio ...	...	*12	*11	*80	*06	*19	*16	*51	*04	7*82	*11	*60	*47	...	*04
Name of that town ...	...	Dhulian	Jagdeshpur	Habiganj	Mainpuri	Dinga	Becketganj Khwajagarj.	Umrer	Bodinayakanur	Mercara	Shikarpur	Kyaukpyu	Taungdwingyi	...	Bodinayakanur
Number of towns without mortality.	...	1	6	2	8	7	2	2	26	...	...	2	2	...	58
Town death rate per 1,000 of population.	...	2*32	1*94	2*47	1*65	1*61	*51	4*82	3*8	11*92	4*04	3*33	1*68	...	2*92*

*Excluding Ajmer-Merwara.

O.—Plague mortality—1912.

Province or State.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	
													1912.	1911.
BRITISH PROVINCES.														
Delhi	14	8	4	40	17	...	...	...	...	4	10	...	97	...
Bengal	58	214	572	635	253	112	35	22	18	17	27	32	1,995	1,879
Bihar and Orissa ...	8,176	14,807	17,875	11,461	2,773	293	67	116	169	213	552	1,822	58,324	73,829
Assam ... ..	..	...	...	...	...	...	...	...	...	...	...	...	...	...
United Provinces of Agra and Oudh	17,850	28,981	34,904	19,799	3,886	364	54	196	505	807	2,081	5,518	114,945	332,301
Punjab	982	2,357	5,700	11,471	7,266	1,168	40	8	50	130	334	299	29,805	175,345
North-West Frontier Province	...	...	...	1	...	...	...	...	...	...	...	...	1	243
Central Provinces and Berar	4,867	6,369	6,159	1,289	42	1	...	...	33	143	148	148	19,199	27,938
Madras Presidency ...	2,281	1,535	589	131	86	23	108	268	259	253	484	634	6,651	15,185
Coorg	8	1	...	...	...	...	...	...	...	...	...	...	9	57
Bombay Presidency ...	8,661	4,702	2,848	1,629	745	222	380	1,076	2,621	2,731	1,997	1,372	28,984	100,399
Burma {	302	473	344	183	100	193	326	277	167	79	29	91	2,564	3,906
	Upper	189	168	80	6	1	3	1	...	...	1	1	450	2,154
Ajmer-Merwara ...	...	...	...	11	1	1	...	...	...	...	...	...	13	346
TOTAL {	43,388	59,615	69,075	46,656	15,170	2,380	1,011	1,953	3,822	4,377	5,663	9,917	263,037	...
	1911	80,953	92,587	171,369	170,880	87,429	11,842	5,980	11,902	24,091	27,917	21,974	26,658	...	733,582
NATIVE STATES, ETC.														
Bengal Native States ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bihar and Orissa Native States.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Assam Native States ...	...	...	...	...	...	...	...	...	...	...	...	...	...	Not available
United Provinces of Agra and Oudh Native States.	34	65	272	482	107	4	...	16	37	14	35	95	1,161	3,669
Punjab Native States ...	223	448	756	1,457	1,694	441	20	5	15	22	57	135	5,273	23,001
Jammu and Kashmir States	9	31	87	109	95	33	..	...	...	...	...	1	*365	*1,096
Baluchistan ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Rajputana	197	269	539	433	284	41	...	2	51	1,028	1,614	915	5,373	18,436
Central India	1,632	1,682	940	574	192	...	...	...	64	138	23	37	5,282	16,129
Native States in Central Provinces	184	140	25	3	...	...	...	...	...	...	...	...	352	373
Bombay Presidency Native States	569	527	281	83	22	28	60	242	381	571	650	400	3,814	17,469
Burma Native States ...	1	1	...	...	...	...	...	...	...	...	...	...	2	...
Hyderabad State ...	7,286	2,715	2,587	421	26	...	...	208	838	598	419	845	15,943	17,579
Mysore	1,547	742	298	92	36	41	175	467	549	467	562	400	5,376	14,617
Bangalore, Civil and Military Station	105	74	41	16	3	6	11	17	33	45	61	55	467	848
Madras Native States ...	23	7	...	13	...	...	...	...	...	...	...	...	43	71
TOTAL {	11,810	6,701	5,826	3,683	2,459	594	266	957	1,968	2,883	3,421	2,883	43,451	...
	1911	11,080	10,923	14,326	17,382	10,420	2,534	1,942	4,687	7,269	11,247	10,412	11,069	...	113,291
GRAND TOTAL {	55,198	66,316	74,901	50,339	17,629	2,974	1,277	2,920	5,799	7,260	9,084	12,800	306,488	...
	1911	92,033	103,510	185,695	188,262	97,849	14,376	7,922	16,589	31,360	39,164	32,386	37,727	...	846,873
Calcutta City	57	183	499	598	238	108	34	22	18	16	27	31	1,831	1,736
Bombay City	33	101	306	610	347	92	61	59	41	19	21	24	1,714	3,997
Madras City ... ..	...	...	...	...	...	...	...	...	...	...	...	1	1	3

* Jammu Province only.

P.—*Mortality from Respiratory Diseases—1912.*

Provinces, Districts, Towns.	Delhi.	Bengal.	Bihar and Orissa.	Assam.	United Provinces of Agra and Oudh.	Punjab.	North-West Frontier Province.	Central Provinces and Berar.	Madras Presidency.	Coorg.	Bombay Presidency.	Lower Burma.	Upper Burma.	Ajmer-Merwara.	Registration India.
I.—Mortality by Provinces:—															
A.—Deaths by months—															
January	265	1,191	737	345	1,959	3,567	127	3,840	3,908	10	5,868	412	214	58	22,50
February	234	841	640	254	1,704	3,190	129	3,170	3,009	5	4,991	423	187	48	18,82
March	184	881	661	276	1,900	3,782	125	3,869	2,827	6	5,953	362	204	50	21,08
April	221	768	595	307	1,488	3,662	118	3,435	2,546	3	5,859	418	215	36	19,57
May	274	687	484	252	1,512	3,637	129	3,660	2,993	...	5,674	343	191	33	19,86
June	271	701	445	260	1,403	3,280	181	3,210	3,097	3	5,088	393	174	15	18,52
July	259	723	511	260	1,299	3,076	126	2,652	3,174	13	5,778	426	214	19	18,53
August	248	794	436	287	1,411	3,023	133	3,638	3,338	7	7,076	534	200	26	21,15
September	329	805	406	274	1,585	3,356	116	4,907	3,213	11	6,619	557	225	20	22,43
October	357	843	458	314	1,401	3,184	128	4,645	3,210	5	6,047	473	245	19	21,32
November	397	916	453	306	1,392	3,526	114	3,898	3,458	6	6,099	378	233	23	21,20
December	321	1,202	665	323	1,756	4,154	110	3,805	3,843	6	5,655	501	225	50	22,61
Total	3,360	10,352	6,497	3,458	18,810	41,447	1,536	44,729	38,616	75	70,712	5,220	2,527	397	247,73
B.—Annual death ratios—															
Ratio per 1,000 of population—1912.	8'54	'22	'18	'57	'40	2'14	'75	3'21	'9	'43	3'61	'82	'73	'79	1'0
Ratio per 1,000 of population—1911.	...	'22	...	...	'53	2'30	'69	2'61	'9	'38	2'63	'84	'63	'63	'9
Difference ... ..	...	...	...	...	—'13	—'16	+ '06	+ '60	...	+ '05	+ '98	—'02	+ '10	+ '16	+ '10
Mean ratio per 1,000 during 1907-1911.	9'82	'20	'20	'51	'44	2'54	'84	2'46	'8	'33	2'97	'87	'71	'59	'98
Difference	—1'28	+ '02	—'02	+ '06	—'04	—'40	—'09	+ '75	+ '1	+ '10	+ '64	—'05	+ '02	+ '20	+ '06
II.—District mortality excluding towns—															
Number of districts affected...	...	26	20	8	47	28	5	24	24	2	25	19	11	...	239
Highest district ratio ... ..	...	1'10	1'82	1'85	9'91	10'15	1'46	13'16	2'7	'16	10'82	'80	1'43	...	13'16
Name of that district ... ..	...	Howrah	Puri	Lakhimpur.	Hamirpur.	Gurdaspur	Hazara	Nimar	Anantapur.	Yedek-naknad. Taluk.	Kalra	Henzada	Shwebo	...	Nimar
Lowest district ratio ... ..	...	'005	'002	'06	'01	'002	'17	'23	'2	'05	'01	'02	'04	...	'002
Name of that district ... ..	...	Noakhali	Purnea	Goalpara	Basti	Multan	Peshawar	Bhandara.	Vizagapatam.	Nanjara-japatna. Taluk.	Upper Sind Frontier	Toungoo	Meiktila	Not available.	Purnea
Number of districts without mortality.	...	...	...	...	1	...	...	...	...	3	...	...	...	...	4
District death rate per 1,000 of population.	...	'08	'17	'57	'24	1'92	'55	2'99	'9	'05	2'78	'36	'29	...	'81
III.—Town mortality—															
Number of towns affected ... ..	...	90	44	12	87	124	13	103	209	2	64	35	17	...	800
Highest town ratio ... ..	...	8'05	2'34	4'48	17'50	10'08	5'98	16'02	7'3	8'35	17'47	10'56	12'64	...	17'50
Name of that town ... ..	...	Manik-talla.	Puri	Tezpur	Rath	Narowal	Haripur	Sehara	Tellicherry	Virajendra-pet.	Ahmedabad.	Yandoon	Myingyan	Not available.	Rath
Lowest town ratio ... ..	...	'04	'04	'16	'05	'17	'33	'18	'05	5'74	'29	'16	'25	...	'04
Name of that town ... ..	...	Nawabganj.	Sassaram	Habiganj	Deoband	Multan	Becketganj, Khwajaganj.	Ratanpur.	Ambur	Mer-cara	Shikarpur	Zalun	Yamethin	...	Nawabganj
Number of towns without mortality	...	22	11	7	6	5	...	1	60	...	1	6	1	...	120
Town death rate per 1,000 of population.	...	2'35	'68	'74	2'62	4'47	3'70	5'53	1'8	6'71	8'72	4'00	5'38	...	3'62*

*Excluding Ajmer-Merwara.

RATIO PER MILLE OF STRENGTH. *																								
A.—ADMISSIONS FROM D.—DEATHS FROM																								
A.—Administrations.	Years.	Average strength.†	Constantly sick.	Cholera.		Small-pox.		Malaria.		Tubercle of the lungs.		Pneumonia.		Respiratory Diseases.		Dysentery.		Diarrhœa.		Anæmia and debility.		All causes.		
				A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Burma ...	{ 1902-1911 1911 1912	{ 13,275 16,282 16,339	{ 17 15 15	1.0 .1 2.3	.61 .66 1.84	.2 .7 .8	.03 .06 .24	59.5 44.0 30.4	.47 .37 .43	7.3 6.9 7.7	3.52 3.56 4.47	3.8 3.3 3.7	1.05 .68 1.10	11.5 9.1 13.5	.47 .25 .86	27.1 15.0 20.6	1.83 1.41 2.39	15.4 8.6 6.7	.50 .12 .18	3.6 4.1 3.4	.21 .06 .18	338.7 307.3 288.9	14.69 12.28 20.69	
Assam ...	{ ... 1911 1912	{ 1,475 1,766 1,600	{ 36 45 39	1.7 .6 1.9	1.49....62	.5....6	.07	316.9 107.6 152.5	3.66 5.10 1.25	5.6 8.5 5.0	2.85 5.66 1.88	10.3 25.5 13.1	3.32 7.36 3.13	21.9 35.1 30.6	.68 2.83 3.75	176.3 233.3 291.9	10.92 16.42 15.62	79.5 90.0 69.4	1.22 2.83 1.25	20.7 19.8 14.4	3.32 3.40 .62	892.6 1,011.3 900.6	37.37 53.89 37.50	
Bengal ...	{ 1902-1911 1911 1912	{ 1,615 11,852 10,621	{ 42 39 44	1.0 .3 .4	.70 .08 .28	.5 .2 .9	.06....28	268.0 251.9 252.1	1.83 1.43 1.69	14.2 13.1 12.5	4.51 4.05 3.30	11.1 10.7 7.5	3.23 2.78 1.79	34.6 34.4 41.6	.99 .76 1.13	212.8 164.0 160.9	5.79 5.65 4.05	83.2 107.2 115.6	.84 .51 1.41	15.6 15.4 17.0	.67 .76 .56	965.3 30.76 973.3	25.03 30.76 21.84	
Bihar and Orissa ...	{ 1902-1911 1911 1912	{ 8,302 7,055 6,320	{ 34 32 32	2.2 .6 3.2	1.18 .43 1.27	.9 .1...	.10	318.6 214.3 179.3	1.46 1.84 .32	8.8 5.7 13.6	3.30 1.98 3.96	8.7 5.8 5.2	2.14 1.13 1.74	29.5 31.9 31.5	.52 .71 .16	155.0 89.6 100.9	5.63 2.69 2.69	87.1 100.4 125.6	1.23 1.28 .95	11.8 18.1 18.0	.75 1.28 .79	906.6 740.6 782.3	23.04 19.38 17.88
United Provinces of Agra and Oudh ...	{ 1902-1911 1911 1912	{ 25,486 23,932 22,327	{ 29 24 23	.5 .3...	.33 .13...	.7 .1 .6	.07	258.3 98.3 137.3	.60 .76 .17	12.2 24.9 17.5	4.83 7.22 5.16	19.0 20.2 16.5	4.49 4.62 3.33	38.5 39.5 37.0	.79 .84 .33	43.0 2.02 39.0	2.44 2.02 2.58	49.1 43.1 41.1	1.09 1.26 .83	21.6 26.1 24.1	.70 1.01 .17	757.2 631.0 604.5	23.06 27.04 19.15
Punjab ...	{ 1902-1911 1911 1912	{ 11,832 11,910 12,010	{ 29 33 29	.2....1	.08......	.6 .3 1.7	.07....42	459.9 197.6 337.9	.75....62	5.5 2.5 3.7	1.49....62	19.7 16.9 11.7	4.18 3.14 .62	32.3 25.7 8.0	.90 ... 1.23	69.7 32.0 41.3	2.61 ... 1.85	40.0 16.3 33.3	.52 .63 1.23	13.9 6.3 5.5	.37	1,046.7 670.6 828.6	19.25 11.29 11.71
North-West Frontier Province ...	{ 1902-1911 1911 1912	{ 1,340 1,594 1,622	{ 31 21 22	.1......	.08......	.4 .6...	.07	459.9 197.6 337.9	.75....62	5.5 2.5 3.7	1.49....62	19.7 16.9 11.7	4.18 3.14 .62	32.3 25.7 8.0	.90 ... 1.23	69.7 32.0 41.3	2.61 ... 1.85	40.0 16.3 33.3	.52 .63 1.23	13.9 6.3 5.5	.37	1,046.7 670.6 828.6	19.25 11.29 11.71
Central Provinces ...	{ 1902-1911 1911 1912	{ 3,872 3,576 3,130	{ 22 22 14	.2....3	.08......	.4 1.1 .3	.05	139.1 86.8 67.0	1.11 .70 .33	5.4 3.7 5.5	2.52 1.08 1.99	16.6 11.6 7.0	4.52 4.42 2.32	33.8 39.3 24.0	1.26 1.51 .77	43.9 31.1 41.0	1.49 1.90 1.99	38.1 34.1 40.8	1.25 1.05 1.55	11.0 9.0 8.8	.68 .58 .55	591.7 429.5 483.4	20.49 18.73 17.23
Bombay ...	{ 1902-1911 1911 1912	{ 8,100 8,598 9,053	{ 38 33 22	.6 ... 4.4	.26 ... 1.88	.8 1.4 1.3	.05	139.1 86.8 67.0	1.11 .70 .33	5.4 3.7 5.5	2.52 1.08 1.99	16.6 11.6 7.0	4.52 4.42 2.32	33.8 39.3 24.0	1.26 1.51 .77	43.9 31.1 41.0	1.49 1.90 1.99	38.1 34.1 40.8	1.25 1.05 1.55	11.0 9.0 8.8	.68 .58 .55	591.7 429.5 483.4	20.49 18.73 17.23	
Madras ...	{ 1902-1911 1911 1912	{ 10,136 10,050 9,056	{ 21 21 20	4.9 .4 2.5	2.26 ... 1.33	.4 .4...	.03	80.4 61.2 49.1	.89 .60 .22	10.1 13.1 8.8	3.12 3.18 2.32	7.4 4.4 2.9	1.73 .76 .33	23.6 26.2 21.9	.40 .60 .66	55.4 33.5 34.8	3.52 1.69 1.10	6.8 10.9 19.2	.12 .30 .55	9.3 6.3 3.4	.50 .30 ...	440.7 415.6 428.2	19.53 13.83 11.37
INDIA†	{ 1902-1911 1911 1912	{ 95,673 97,215 92,626	{ 28 26 25	1.2 .2 1.4	1.65....77	.6 .4 .8	.03....13	195.6 113.8 105.2	1.06 .96 .52	9.0 10.5 9.6	3.36 3.65 3.18	11.7 10.2 8.0	2.90 2.37 1.72	26.0 28.3 24.0	.80 .75 .79	74.5 56.6 55.4	3.44 2.91 2.59	39.6 38.6 41.2	.90 .78 .79	11.9 10.8 10.6	.52 .53 .27	649.6 537.7 535.6	20.15 18.44 16.74	
ANDAMANS ...	{ 1902-1911 1911 1912	{ 15,488 11,884 11,280	{ 73 62 75	.0......	.01......	.0......	.00	680.4 52.2 99.1	3.51 2.02 1.60	10.8 5.8 8.1	4.85 4.71 6.21	13.7 15.0 17.8	4.85 4.71 6.21	63.8 67.8 74.2	1.14 .59 1.60	127.9 93.8 99.1	7.46 3.70 6.03	47.2 50.5 45.9	.93 .84 .41	.1 .2 .4	... ... ...	1,755.0 1,249.8 1,624.2	33.23 24.40 31.65
INDIA‡	{ 1902-1911 1911 1912	{ 109,160 106,092 103,806	{ 34 30 30	1.1 .2 1.3	.57....68	.4 .7...	.05....12	308.8 175.5 201.6	1.36 1.07 .74	9.2 9.9 9.5	3.14 2.62 2.20	11.9 10.7 9.1	3.14 2.62 2.20	30.7 32.6 29.4	.84 .74 .88	81.1 60.7 60.2	3.94 3.00 2.96	40.5 39.9 41.7	.90 .79 .75	10.4 9.6 9.5	.46 .48 .25	786.2 615.2 653.8	21.76 19.09 18.86

* Excluding subsidiary jails.
† Including Ajmer, Sibi, Quetta, Mercara and Secunderabad, and excluding Andamans.
‡ The decennial ratios are worked on the total strength of the ten year period.
§ Including Andamans.

RATIO PER MILE OF STRENGTH.*

B.—Groups.	Years.	Average strength.†	Constantly sick.	A.—ADMISSIONS FROM										D.—DEATHS FROM										All causes.	
				Influenza.		Cholera.		Small-pox.		Enteric Fever.		Malaria.		Pyrexia of uncertain origin.		Pneumonia.		Dysentery.		Diarrhoea.					
				A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
Group I.—Burma Coast and Bay Islands.	1902-1911	13,206	30	3.3	.02	.4	.19	.2	.03	.6	.18	382.2	1.51	16.1	1.79	5.6	3.97	37.5	.74	797.9	20.18				
	1911	11,314	15	.5	...	.1	...	1.1	.09	2.3	.44	55.9	.27	38.6	.44	3.3	1.59	10.7	.18	342.0	13.08		
" II.—Burma Inland	1902-1911	4,061	18	2.0	...	2.1	1.38	.1	...	1.1	.32	59.3	.69	11.1	1.60	5.3	2.78	23.0	1.01	344.2	17.24				
	1911	4,968	14	...	...	.2	.20	...	...	2.6	.20	16.7	.60	22.1	1.21	3.2	1.01	3.8	...	228.5	10.47
" III.—Assam	1902-1911	5,186	13	.2	...	6.0	4.82	1.7	.39	.4	.19	25.6	1.16	9.8	1.16	5.8	17.0	5.6	...	227.7	20.83				
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" IV.—Bengal and Orissa	1902-1911	1,412	37	14.0	...	1.8	1.56	.6	.07	.9	.28	318.9	3.61	1.6	3.26	10.3	10.63	79.7	1.20	894.2	35.84				
	1911	1,676	47	...	...	2.0	.66	...	...	...	...	149.1	4.77	1.8	7.76	26.8	17.30	90.1	1.16	1,008.9	61.16
" V.—Bengal and Orissa	1902-1911	1,516	40	...	...	...	...	...	...	...	...	...	1.32	25.1	3.30	13.2	294.9	69.9	1.32	903.7	38.92
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" VI.—Bengal and Orissa	1902-1911	12,571	41	11.7	.32	1.5	.90	.5	.06	.0	.29	295.9	1.81	3.7	3.13	10.8	5.97	81.5	.95	946.9	25.11				
	1911	12,678	38	.6	.08	.4	.79	.2	.26	.4	.24	253.4	1.34	1.5	2.60	10.1	162.3	105.3	.47	905.6	20.11				
" VII.—Gangetic Plain and Chutia Nagpur.	1902-1911	11,396	43	2.1	.09	1.8	.79	.9	.07	1.5	.44	243.6	1.58	10.4	1.76	7.4	157.2	112.0	1.40	952.4	22.20				
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" VIII.—Gangetic Plain and Chutia Nagpur.	1902-1911	23,264	29	4.0	.04	.9	.55	.9	.07	.5	.12	214.6	1.23	6.3	2.28	10.2	76.1	43.0	1.15	658.6	19.12				
	1911	21,203	26	1.3	...	.3	.24	.1	...	.8	.24	113.5	1.37	4.4	1.27	7.8	49.4	44.0	1.46	498.6	16.60
" IX.—Upper Sub-Himalaya	1902-1911	12,632	29	7.4	.14	.1	.01	.6	.10	.6	.05	101.8	.41	7.4	1.54	6.2	45.3	49.3	.62	525.6	12.26				
	1911	12,570	27	4.5	...	.1	...	.2	.32	.2	.16	135.2	.24	15.0	2.47	19.9	27.0	39.7	1.33	771.1	20.70
" X.—North-West Frontier, Indus Valley and North-Western Rajputana.	1902-1911	8,308	29	5.9	.12	...	.06	.9	.08	.4	.12	220.9	.90	2.4	6.04	23.9	2.53	40.0	.78	687.1	23.65		
	1911	9,101	30	.4	...	...	...	.9	.11	.3	.11	109.1	.33	5.7	5.38	20.7	42.7	23.4	.55	592.2	23.29
" XI.—South-Western Rajputana, Central India and Gujara- rat.	1902-1911	4,460	23	1.9	.02	.3	.25	.5	.02	.2	.07	195.1	.63	.7	4.06	18.2	26.5	29.8	.81	620.2	18.14				
	1911	4,194	23	4.1	...	4.0	1.76	.4	...	.3	...	83.9	.95	.2	2.38	12.2	14.5	20.5	.48	443.7	12.87		
" XII.—Deccan	1902-1911	3,979	28	...	...	...	.19	.3	.04	.4	.12	187.8	.82	5.8	1.71	6.5	53.1	40.4	.75	415.4	14.58
	1911	7,475	24	2.1	...	...	...	.6	...	.7	.14	98.1	.83	11.9	2.07	6.8	70.1	29.0	.53	546.4	22.39
" XIII.—Western Coast	1902-1911	7,014	19	4.0	...	...	1.43	.4	...	.6	.14	54.6	.29	34.6	1.71	6.6	56.2	48.5	1.14	510.4	16.11
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" XIV.—Southern India	1902-1911	2,465	23	.0	...	1.5	.61	.8	.08	5.6	.14	113.6	1.22	10.4	2.23	8.6	53.0	38.0	1.62	503.1	24.26				
	1911	2,320	22	...	...	...	...	.9	.43	2.6	.43	40.8	...	4.3	2.58	8.2	34.8	48.0	1.72	416.5	20.61
" XV.—Hills	1902-1911	2,208	20	...	...	...	...	.5	...	2.3	...	68.8	...	5.4	1.81	6.8	53.0	32.2	3.62	446.6	14.95
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" XVI.—Hills	1902-1911	9,164	21	.5	.01	5.0	2.17	.3	.02	1.1	.22	80.9	.73	21.1	1.80	7.3	54.5	5.5	.12	439.4	18.82				
	1911	9,170	21	...	...	.4	.22	.2	...	.9	.22	66.1	.65	14.9	.55	4.1	35.9	10.6	.33	413.0	13.85
" XVII.—Hills	1902-1911	8,310	20	...	...	2.8	1.44	...	...	1.4	...	48.6	.24	54.5	.36	3.0	37.4	20.9	.60	429.8	12.03
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" XVIII.—Hills	1902-1911	586	27	...	...	6.8	5.12	.9	...	2.6	1.36	253.4	3.07	11.8	5.63	21.3	87.6	57.1	1.71	867.5	36.49		
	1911	540	24	...	...	...	...	...	...	...	...	172.2	3.70	7.4	3.70	18.5	77.8	61.1	...	874.1	12.96
" XIX.—Hills	1902-1911	534	28	...	...	...	...	...	...	5.6	...	250.9	...	7.5	5.62	22.5	125.5	106.7	1.87	985.0	22.47
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
INDIA †	1902-1911	95,672	28	5.3	.08	1.2	.65	.6	.06	.8	.22	195.6	1.06	8.4	2.90	11.7	74.5	39.6	.90	649.6	20.15				
	1911	97,215	26	.9	.01	.4	.77	.4	.03	.9	.22	113.8	.96	11.0	2.37	10.2	56.6	38.6	.78	537.7	18.44				
ANDAMANS	1902-1911	92,626	25	1.3	.02	1.4	.77	.8	.13	.9	.12	105.2	.52	18.6	1.72	8.0	55.4	41.2	.79	535.6	16.74				
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
INDIAS	1902-1911	13,488	73	6.0	.01	.0	.01	...	...	.1	.03	1,111.9	3.51	9.3	4.86	13.7	127.9	47.2	.93	1,755.0	33.22	
	1911	11,884	62	...	...	...	...	...	...	.2	.17	680.4	2.02	.1	4.71	15.0	93.8	50.5	.84	1,249.8	24.49
INDIAS	1902-1911	11,280	75	...	...	...	...	...	...	...	...	993.7	2.57	6.1	6.21	17.8	99.1	45.9	.44	1,624.2	31.65
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
INDIAS	1902-1911	109,160	34	5.4	.07	1.1	.57	.5	.05	.7	.19	308.8	1.36	8.5	3.14	11.9	81.1	40.5	.90	786	21.76				
	1911	100,093	30	.8	.01	.2	.68	.4	.03	.8	.21	175.5	1.07	.5	2.62	10.7	60.7	30.9	.79	615	19.09				
INDIAS	1902-1911	103,906	30	1.2	.02	1.3	.68	.7	.12	.8	.11	201.6	.74	17.3	2.20	9.1	60.2	41.7	.75	653.8	18.36				
	1911	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Excluding subsidiary jails.
† Including Aden and excluding Andamans.
‡ The decennial ratios are worked on the total strength of the ten year period.
§ Including Andamans.

C.—Causes of admission.					Years*.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Cholera	...	...	...	...	1908	6	1	10	16	33	65	114	81	3	4	3	1	337
					1909	2	1	4	5	7	54	82	33	6	4	2	1	202
					1910	2	2	4	5	2	4	13	8	1	...	1	...	42
					1911	...	...	2	3	3	...	1	1	...	2	3	4	19
					1912	...	...	1	3	7	13	22	40	...	19	24	1	130
Total ...					1908-1912	10	4	21	32	52	136	232	163	10	29	33	7	729
Enteric Fever ...	...	...	...	...	1908	5	8	3	9	5	13	11	13	24	14	3	5	113
					1909	2	1	9	6	10	5	14	18	7	7	4	3	86
					1910	4	7	3	8	6	9	9	11	8	8	11	3	27
					1911	2	6	8	6	3	12	12	5	8	8	10	6	86
					1912	6	3	4	7	11	3	8	11	12	3	8	5	81
Total ...					1908-1912	19	25	27	36	35	42	54	58	59	40	36	22	453
Malaria	...	...	...	...	1908	926	662	824	967	1,132	1,217	1,267	1,803	3,084	3,634	2,768	1,755	20,039
					1909	1,119	822	1,070	1,442	1,664	1,380	1,793	1,751	1,666	1,713	1,518	1,144	17,082
					1910	778	699	795	940	1,002	1,002	1,243	1,342	1,481	1,465	1,406	1,056	13,209
					1911	797	726	709	777	795	815	1,023	1,061	1,066	1,211	1,240	840	11,060
					1912	589	567	591	616	649	596	927	1,052	1,098	1,240	1,051	767	9,743
Total ...					1908-1912	4,209	3,476	3,989	4,742	5,242	5,010	6,253	7,009	8,395	9,263	7,983	5,562	71,133
Pyrexia of uncertain origin	...	...	...	...	1908	36	35	61	68	77	79	78	69	66	208	97	79	953
					1909	65	62	65	77	102	68	118	109	100	116	102	87	1,071
					1910	69	52	62	77	105	80	104	111	95	81	63	66	965
					1911	60	74	71	48	66	103	115	141	94	127	87	54	1,040
					1912	54	64	80	60	119	148	150	162	238	243	227	180	1,725
Total ...					1908-1912	284	287	339	330	469	478	565	592	593	775	576	466	5,754
Dysentery	...	...	...	...	1908	350	260	422	539	543	559	837	1,023	953	824	810	676	7,796
					1909	502	413	508	404	443	599	863	843	643	604	619	518	6,959
					1910	316	290	406	372	399	425	687	737	539	505	498	485	5,659
					1911	306	280	455	387	411	366	591	672	566	535	527	407	5,503
					1912	316	287	397	384	452	369	427	732	551	464	440	313	5,132
Total ...					1908-1912	1,790	1,530	2,188	2,086	2,248	2,318	3,405	4,007	3,252	2,932	2,894	2,399	31,049
Diarrhoea	...	...	...	...	1908	177	167	297	359	356	354	464	472	355	336	254	235	3,806
					1909	222	199	325	302	379	307	510	476	326	279	272	225	3,822
					1910	184	210	249	253	257	270	492	499	320	301	317	264	3,616
					1911	222	196	358	355	274	315	428	434	357	302	321	195	3,757
					1912	159	196	288	284	309	292	427	596	381	321	292	269	3,814
Total ...					1908-1912	964	968	1,517	1,553	1,555	1,538	2,321	2,477	1,739	1,539	1,456	1,188	18,815

* Excluding Andamans.

D.—SICKNESS AND MORTALITY FROM PRINCIPAL DISEASES.	INFLUENZA.				CHOLERA.				SMALL-POX.				ENTERIC FEVER.				MALARIA.				PYREXIA OF UNCERTAIN ORIGIN.				TUBERCLE OF THE LUNGS.				PNEUMONIA.			
	Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.	
	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.
Years.	Average annual strength.†																															
1903	834	13	9.4	.15	97	57	1.1	.64	62	6	.7	.07	45	25	.5	.28	22,758	97	256.6	1.09	540	1	6.1	.01	769	281	8.7	3.17	1,306	302	13.6	3.41
1904	370	17	4.1	.19	47	31	.5	.34	25	4	.3	.04	55	14	.6	.15	19,627	75	217.2	.83	735	...	8.1	...	763	279	8.4	3.09	965	252	10.7	2.79
1905	1,057	15	11.5	.16	73	40	.8	.44	64	31	.3	.04	64	15	.7	.16	16,813	104	182.9	1.13	892	1	9.7	.01	803	293	8.7	3.10	896	210	9.7	2.28
1906	565	12	5.9	.13	187	105	2.0	1.10	102	82	.9	.09	102	18	1.1	.19	19,905	92	208.7	.96	630	...	9.7	...	844	306	8.8	3.21	963	243	10.1	2.55
1907	454	7	4.9	.08	140	55	1.5	.59	65	6	.7	.06	65	19	.7	.20	17,841	88	191.3	.94	478	...	5.1	...	704	256	7.5	2.74	1,074	270	11.5	2.90
1908	430	4	4.2	.04	337	170	3.3	1.63	123	15	1.2	.15	113	35	1.1	.36	20,039	105	197.7	1.04	953	2	9.4	.02	951	381	9.4	3.76	1,259	328	12.4	3.24
1909	149	...	1.5	...	201	111	2.0	1.12	50	2	.5	.02	86	21	.9	.21	17,076	118	172.3	1.19	1,071	2	10.8	.02	980	368	9.9	3.71	1,422	357	14.3	3.60
1910	194	...	2.0	...	42	23	.4	.23	27	3	.3	.03	87	23	.9	.23	13,209	88	134.7	.90	965	4	9.8	.03	853	334	8.7	3.41	1,079	252	11.0	2.57
1911	90	1	.9	.01	19	10	.2	.10	43	3	.4	.03	86	21	.9	.22	11,060	93	113.8	.96	1,040	5	11.0	.05	1,016	355	10.5	3.65	988	230	10.2	2.37
1912	124	2	1.3	.02	130	71	1.4	.77	71	12	.8	.13	81	11	.9	.12	9,743	48	105.2	.52	1,725	4	18.6	.04	891	295	9.6	3.18	742	159	8.0	1.72

Years.	RESPIRATORY DISEASES.				DYSENTERY.				DIARRHŒA.				ANÆMIA AND DEBILITY.				E. Causes of deaths. 1912.				DIED PER 1,000 OF AVERAGE STRENGTH.				RELATIVE LIABILITY IN PERCENTAGES.				PERCENTAGES IN DEATHS FROM ALL CAUSES.			
	Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.		Actuals.		Ratios.		Causes of deaths. 1912.				European troops.		Indian troops.		Prisoners.†		European troops.		Indian troops.		Prisoners.†	
	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Admissions.	Deaths.	Admission rates.	Death rates.	Causes of deaths. 1912.				European troops.		Indian troops.		Prisoners.†		European troops.		Indian troops.		Prisoners.†	
1903	2,423	63	27.3	.71	7,202	233	82.3	3.19	3,714	68	41.9	.77	1,058	39	11.9	.44	...	...	...	...	14		2		.77		13		24		64	
1904	2,264	59	25.1	.65	7,747	263	85.7	2.91	3,774	88	41.8	.97	1,116	37	12.4	.41	...	...	...	...	.61		.84		.68		22		39		32	
1905	2,428	85	26.4	.92	7,496	277	81.6	3.01	3,603	68	39.2	.74	1,014	50	11.0	.54	Bowel-complaints	...	...	...	.15		.12		3.38		4		3		93	
1906	2,400	68	25.2	.71	7,525	310	78.9	3.25	3,734	70	39.1	.73	1,193	52	12.5	.55	Anæmia and debility	...	...	...	.01		.08		.27		3		22		75	
1907	2,568	68	27.5	.73	6,328	240	67.9	2.57	3,207	75	34.4	.80	1,048	42	11.2	.45	Pneumonia...	...	...	...	.28		.83		1.72		10		29		61	
1908	2,366	104	23.3	1.03	7,796	473	76.9	4.67	3,806	95	37.6	.94	1,194	56	11.8	.55	Respiratory diseases	...	...	...	.08		.17		.79		8		16		76	
1909	2,311	83	23.3	.84	6,959	416	70.2	4.20	3,822	103	38.6	1.04	1,165	59	11.3	.60	Tubercle of the lungs...	...	...	...	.15		.24		3.18		4		7		89	
1910	2,632	89	26.8	.91	5,659	339	57.7	3.46	3,616	78	36.9	.80	1,075	52	11.0	.53	All other causes	...	...	...	3.18		1.85		5.95		29		17		54	
1911	2,747	74	28.3	.76	5,593	283	56.6	2.91	3,757	76	38.6	.73	1,049	52	10.8	.53	...	...	...	...	...		...		...		...		...		...
1912	2,221	73	24.0	.79	5,132	240	55.4	2.59	3,814	73	41.2	.79	982	24	10.6	.27	All causes	...	...	...	4.62		4.42		16.74		18		17		65	

† Enteric, Malaria and Pyrexia of uncertain origin. ‡ Excluding Andamans.

F.—Statistics of convicts only. Ad.=Admission rates. D.=Death rates.		1908.			1909.			1910.			1911.			1912.		
		Average strength.	RATIO PER 1,000 OF STRENGTH.		Average strength.	RATIO PER 1,000 OF STRENGTH.		Average strength.	RATIO PER 1,000 OF STRENGTH.		Average strength.	RATIO PER 1,000 OF STRENGTH.		Average strength.	RATIO PER 1,000 OF STRENGTH.	
			Ad.	D.		Ad.	D.		Ad.	D.		Ad.	D.		Ad.	D.
Burma	{ Central...	8,376	279'8	12'89	8,137	331'4	19'17	9,779	299'1	11'56	10,868	305'4	12'42	10,637	277'9	22'28
	{ District...	4,788	261'3	13'58	4,817	261'2	10'59	4,151	310'6	10'60	4,471	281'6	11'41	4,653	285'4	17'84
Assam including Eastern Bengal up to 1911.	{ Central...	2,001	785'6	43'48	2,032	668'8	31'00	2,016	568'0	27'28	2,045	609'3	20'54	...	...	...
	{ District...	4,883	981'2	27'65	4,852	1,011'8	30'40	5,107	905'4	36'81	5,056	1,060'7	39'95	1,625	904'0	36'92
Bengal excluding Eastern Bengal up to 1911.	{ Central...	7,852	927'0	26'36	7,943	965'4	28'45	7,300	922'9	18'49	7,239	851'2	19'62	5,416	926'0	16'62
	{ District...	6,724	973'4	38'22	7,123	948'9	20'78	5,863	899'4	19'79	5,203	880'2	17'28	4,675	1,083'4	29'30
Bihar & Orissa	{ Central...	...	...	...	...	...	...	...	...	...	...	...	...	2,749	700'3	19'64
	{ District...	...	...	...	...	...	...	...	...	...	...	...	...	3,178	853'7	16'99
United Provinces.	{ Central...	11,287	453'2	20'20	10,682	443'9	24'81	10,406	397'8	14'70	9,952	348'9	12'96	9,133	364'1	8'98
	{ District...	14,076	845'6	26'57	13,262	657'5	23'68	12,759	497'8	16'15	11,910	498'4	15'45	11,217	463'1	11'50
Punjab	{ Central...	4,522	529'4	31'84	4,488	522'5	31'42	4,919	516'4	35'37	4,872	710'4	35'71	5,898	638'0	23'23
	{ District...	6,244	649'3	18'90	6,026	710'8	20'74	6,030	639'8	23'86	6,120	611'6	23'69	5,201	626'0	15'96
North-West Frontier Province.	{ Central...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ District...	1,040	1,431'7	14'42	974	1,238'2	23'61	1,044	1,030'7	19'16	1,076	784'4	12'08	1,090	985'3	10'09
Central Provinces.	{ Central...	2,358	681'5	19'93	2,613	559'1	13'78	2,499	517'0	43'22	2,204	534'0	36'30	1,932	274'3	13'46
	{ District...	1,177	604'1	26'34	1,220	480'3	19'67	1,162	511'2	30'12	1,074	518'6	25'14	884	645'9	31'67
Bombay	{ Central...	3,321	727'8	19'57	3,000	643'0	18'67	3,166	532'8	14'53	3,360	402'7	15'48	3,650	507'1	16'99
	{ District...	4,592	615'4	16'77	4,913	674'5	17'50	4,831	511'7	15'11	5,083	464'9	20'66	4,793	389'1	19'61
Madras	{ Central...	7,641	417'1	21'86	7,845	521'7	24'35	7,738	435'5	14'09	7,938	407'4	12'60	7,048	430'8	10'64
	{ District...	2,876	675'2	58'07	2,892	566'4	29'74	2,804	613'4	21'04	1,960	610'7	18'88	1,827	662'3	16'97
Total of the above provinces.	{ Central...	47,358	547'2	22'23	46,740	562'6	24'26	47,823	498'4	18'67	48,478	483'2	17'62	46,463	482'0	16'42
	{ District...	46,400	765'3	26'70	46,063	709'0	21'80	43,750	623'0	20'23	41,958	616'6	20'35	39,143	606'6	18'14

G.—Statistics of convicts only. Arranged according to duration of confinement.					Not exceeding six months.	Above six months and not exceeding one year.	Above one year and not exceeding two years.	Above two years and not exceeding three years.	Above three years and not exceeding seven years.	Above seven years.	Total.
1908.	{ District Jails ...	Strength	...	...	24,367	10,893	6,330	2,727	1,961	372	46,650
		Deaths	...	...	819	214	122	34	43	7	1,239
		Ratio per 1,000 of strength	...	...	33'61	19'65	19'27	12'47	21'93	18'82	26'56
1909.	{ Central Jails ...	Strength	...	...	13,622	8,999	8,930	6,601	6,324	3,136	47,612
		Deaths	...	...	286	172	192	140	198	65	1,053
		Ratio per 1,000 of strength	...	...	21'00	19'11	21'50	21'21	31'31	20'73	22'12
1910.	{ District Jails ...	Strength	...	...	24,024	10,705	6,201	2,902	2,038	355	46,225
		Deaths	...	...	626	186	114	36	35	7	1,004
		Ratio per 1,000 of strength	...	...	26'06	17'38	18'38	12'41	17'17	19'72	21'72
1911.	{ Central Jails ...	Strength	...	...	13,170	8,624	8,423	6,693	6,835	3,088	46,833
		Deaths	...	...	264	164	253	145	243	65	1,134
		Ratio per 1,000 of strength	...	...	20'05	19'02	30'04	21'66	35'55	21'05	24'21
1912.	{ District Jails ...	Strength	...	...	22,000	10,803	6,126	2,568	2,119	364	43,980
		Deaths	...	...	495	181	134	30	38	7	885
		Ratio per 1,000 of strength	...	...	22'50	16'75	21'87	11'68	17'93	19'23	20'12
1913.	{ Central Jails ...	Strength	...	...	13,820	8,937	8,628	6,068	7,056	3,302	47,811
		Deaths	...	...	209	151	188	128	168	49	893
		Ratio per 1,000 of strength	...	...	15'12	16'90	21'79	21'09	23'81	14'84	18'68
1914.	{ District Jails ...	Strength	...	...	14,807	9,408	8,688	5,830	7,191	2,450	48,374
		Deaths	...	...	174	146	160	107	202	65	854
		Ratio per 1,000 of strength	...	...	11'75	15'52	18'42	18'35	28'09	26'53	17'65
1915.	{ Central Jails ...	Strength	...	...	20,444	10,423	5,735	2,742	2,252	492	42,088
		Deaths	...	...	457	192	118	39	41	7	854
		Ratio per 1,000 of strength	...	...	22'35	18'42	20'58	14'22	18'21	14'23	20'29
1916.	{ District Jails ...	Strength	...	...	20,402	9,384	5,791	2,651	1,846	422	40,496
		Deaths	...	...	420	141	99	23	25	2	710
		Ratio per 1,000 of strength	...	...	20'59	15'03	17'10	8'63	13'54	4'74	17'53
1917.	{ Central Jails ...	Strength	...	...	14,830	8,781	8,612	5,561	6,683	2,143	46,610
		Deaths	...	...	233	132	146	86	127	39	763
		Ratio per 1,000 of strength	...	...	15'71	15'03	16'95	15'46	19'00	18'20	16'37

Statement No. 1.—Total primary vaccinations and re-vaccinations, successful cases among children, cost of the Special Vaccination Department, etc., during the official year 1912-13.

Province.	Number of operations performed by the Special and Dispensary Staffs combined.		Percentage of successful cases* to total operations.		Number of children successfully vaccinated by the Special and Dispensary Staffs combined.		Average number of persons vaccinated by each vaccinator of the Special Staff.	Total cost of the Special† Department.	Average cost of each successful case vaccinated by the Special Department.
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Under one year.	1 to 6 years			
Delhi	11,267	1,965	98·13	65·25	9,962	683	2,205	Rs. 2,403	Rs. A. P. 0 3 3
Bengal	1,787,143	197,256	98·24	61·29	633,057	918,206	1,345	172,212	0 1 6
Bihar and Orissa	1,269,400	26,913	99·59	69·35	651,263	575,645	1,131	82,305	0 1 0
Assam	298,983	34,380	97·91	73·99	66,191	183,398	964	66,343	0 3 6
United Provinces of Agra and Oudh	1,468,162	124,276	97·19	73·12	987,814	376,593	1,729	180,512	0 1 9
Punjab	710,994	321,853	97·99	73·50	532,665	115,795	3,735‡	125,812	0 2 4
North-West Frontier Province ...	125,109	27,631	99·01	88·88	73,112	33,234	3,968§	15,236	0 1 8
Central Provinces and Berar ...	503,956	70,554	98·29	72·90	395,336	86,124	1,954	69,385	0 2 1
Madras	1,461,790	124,554	88·4	79·0	568,905	563,558	1,888||	¶1328,342	0 3 11
Coorg	8,977	4,096	94·64	81·98	617	4,133	1,414	2,876	0 4 2
Bombay	711,222	70,948	97·99	53·19	511,423	115,400	1,760	376,586	0 9 2
Burma	422,089	122,263	96·69	67·64	97,388	197,403	**1,930	205,199	0 7 3
Ajmer-Merwara	13,825	117	95·21	93·17	10,802	1,772	911	3,216	0 3 11
Total	8,792,917	1,126,806	96·54	70·57	4,538,535	3,171,944	1,630	1,630,427	0 2 11

* Excluding those the results of which were not known.
† Excluding dispensaries.
‡ Including vaccinations performed in Cantonments.
§ Including vaccinations performed in Cantonments and Political Agencies.
|| Excludes average of work done by each medical subordinate.
¶ Excluding Madras Presidency town.
** Excluding the work done by private medical practitioners.

Statement No. 11.—Vaccination operations performed by the Special and Dispensary Establishments separately, deaths from small-pox, etc., during the official year 1912-13.

Province.	Population.	NUMBER OF OPERATIONS (PRIMARY AND REVACCINATIONS COMBINED).			Ratio of successful vaccinations per 1,000 of population.	Percentage of annual estimated births at 40 per 1,000 of population successfully vaccinated.	DEATHS FROM SMALL-POX.*	
		By Special Department.	By Dispensary Staff.	Total.			Number.	Ratio per 1,000 of population.
Delhi	393,356	13,232	...	13,232	29·48	63·32	517	1·31
Bengal	43,471,942	1,890,112	94,287	1,984,399	40·79	36·41	8,287	·18
Bihar and Orissa... ..	34,635,017	1,237,294	59,019	1,296,313	36·84	47·01	2,357	·06
Assam	7,059,857	331,773	1,590	333,363	44·57	23·44	4,696	·77
United Provinces of Agra and Oudh	46,835,108	1,591,505	933	1,592,438	31·84	52·73	3,101	·07
Punjab	19,566,432	1,022,244	10,603	1,032,847	43·93	68·06	30,339	1·57
North-West Frontier Province ...	2,908,002	152,434	306	152,740	49·11	62·85	2,017	·99
Central Provinces and Berar ...	13,916,308	573,687	823	574,510	38·18	71·02	4,556	·33
Madras	41,390,849†	1,586,106	238	1,586,344	31·7	34·36	16,094	·4
Coorg	174,976	12,826	247	13,073	64·66	8·82	53	·30
Bombay	22,657,077	773,471	8,699	782,170	29·06	56·43	6,331	·32
Burma	12,115,217	533,647	10,705	544,352	38·62	20·10	7,959	·81
Ajmer-Merwara	501,395	13,942	Not available	13,942	25·94	53·86	3,050	6·08
Total	245,625,536	9,732,273	187,450	9,919,723	36·49	46·19	89,357	·37

* For the Calendar year, from the Provincial Sanitary reports.
† Excluding the population of Bangalore and Secunderabad Cantonments.

Statement No. III.—Vaccination in the European and Indian Armies during 1912.
Effective strength.

Armies.	EUROPEAN TROOPS.								INDIAN TROOPS.							
	OFFICERS.				WARRANT AND NON-COMMISSIONED OFFICERS AND MEN.				EUROPEAN OFFICERS.				INDIAN COMMISSIONED, NON-COMMISSIONED OFFICERS AND MEN.			
	Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.	
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
Northern	216	...	59	1	5,560	100	49	6	382	100	60	2,618	28,389	71	48
Southern	72	...	43	9	2,954	33	41	...	132	...	26	2,301	18,098	56	44
Extra India not in the Indian Command	69	...	86	45	869	71	65
India	...	288	...	55	10	8,514	40	46	6	583	100	55	4,964	47,356	64	47

NON-EFFECTIVE STRENGTH,—FAMILIES.

A.—European Troops.

Armies.	OFFICERS' WIVES.				OFFICERS' CHILDREN.				SOLDIERS' WIVES.				SOLDIERS' CHILDREN.			
	Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.	
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.

Northern	72	...	64	39	30	72	93	2	366	100	73	692	463	82	79
Southern	16	...	38	13	5	69	40	3	206	67	66	501	219	75	64
India	...	88	...	59	52	35	71	86	5	572	80	71	1,193	682	79	74

B.—Indian Troops.

Armies.	EUROPEAN OFFICERS' WIVES.				EUROPEAN OFFICERS' CHILDREN.				INDIAN SOLDIERS' WIVES.				INDIAN SOLDIERS' CHILDREN.			
	Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.		Number.		Percentage of success- ful cases to total operations.	
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.

Northern	9	88	67	72	27	12	93	100	705	1,978	81	57	6,389	2,219	90	55
Southern	2	24	...	67	37	14	51	43	197	837	84	64	4,078	548	85	49
Extra India not in the Indian Command	...	11	...	82	4	2	100	100	...	...	...	...	...	1	...	100
India	11	123	55	72	68	28	71	71	902	2,815	82	59	10,467	2,768	88	54

ANNUAL RETURN
OF THE
EUROPEAN ARMY OF INDIA
OF THE
INDIAN ARMY AND OF THE JAIL
POPULATION

FOR THE YEAR

1912



Returns relating to the European and Indian Armies compiled in the Office of the Director, Medical Services in India, and those relating to Prisoners in the Office of the Sanitary Commissioner with the Government of India.

I.—EUROPEAN TROOPS, 1912.



TABLE A.

Grouping of Diseases in the Main Tables for 1912.

HEAD OF DISEASE.	Includes or includes also
CHOLERA	
HEAT-STROKE	Sunstroke.
ALCOHOLISM	Delirium tremens. Alcoholic Poisoning.
TUBERCLE OF THE LUNGS	Tubercular Phthisis, and Hæmoptysis due to tubercle.
RESPIRATORY DISEASES	Includes Hæmoptysis and Cirrhosis of the lung not due to tubercle.
ANÆMIA AND DEBILITY	Old age (Tables for men and women). Premature birth (Tables for children).
DIARRHŒA	
HEPATIC CONGESTION AND INFLAMMATION.	Congestion of liver, Hepatitis, Perihepatitis ; but excludes Cirrhosis of liver.
VENEREAL DISEASES	Syphilis, Gonorrhœa, and Soft Chancre.
PHAGEDÆNA, SLOUGH, AND GANGRENE.	Nomenclature of 1906, Nos. 17, 954, and 967.
ABSCCESS, ULCER, AND BOIL	Nomenclature of 1906, Nos. 953 and 965.
ABORTION AND AFFECTIONS CONNECTED WITH PREGNANCY	Nos. 506 and 827 to 838.
AFFECTIONS CONNECTED WITH AND CONSEQUENT ON PARTURITION.	Nos. 839 to 870 and all other diseases stated as puerperal by medical officers.
ALL OTHER DISEASES PECULIAR TO WOMEN.	Nos. 765 to 826 and 871 to 882.

} These two headings appear only in jail tables.

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NOTE.—In the tables for European troops, Indian troops, and for prisoners, the months mentioned are calendar months.

TABLE B.

STATIONS by ARMIES.

STATIONS	Height above sea level in feet.*	Authority for height.††	STATIONS.	Height above sea level in feet.*	Authority for height.††	STATIONS.	Height above sea level in feet.*	Authority for height.††
NORTHERN ARMY—			NORTHERN ARMY— <i>contd.</i>			SOUTHERN ARMY— <i>contd.</i>		
Ambala	902	S. G.	†Landour Convalescent Depôt.	7,362	S. G.	†Khandalla Sanatorium	2,000	M. O.
Agra	554	„	†Lebong	6,000	I. B.	Deesa	468	S. G.
Allahabad and Fort	298	„	Lucknow and Military Prison	400	S. G.	Deolali Depôt	1,829	„
Amritsar	756	„	Meerut	739	„	Fort Dufferin (Mandalay)	249	„
Bareilly	560	„	Multan	402	„	Hyderabad (Sind)	134	I. B.
†Barian Camp and Khairagali	{ 7,133 7,678	I. B. S. G.	†Murree Convalescent Depôt and Upper and Lower Topas.	{ 7,250 7,000 7,320	M. O. I. B.	Jhansi	860	S. G.
Barrackpore	24	„	Muttra	576	„	Jubbulpore	1,306	„
Benares	256	„	†Naini Tal Convalescent Depôt.	6,400	S. G.	Karachi	28	„
Campbellpore	1,200	M. O.	Nowshera	1,100	M. O.	Kamptee and Sitabaldi	930	„
Attock	1,192	S. G.	Peshawar	1,165	S. G.	Kirkee	1,837	„
Cawnpore	417	„	†Ranikhet and Chaubuttia	{ 5,983 6,942	„	Madras, and St. Thomas' Mount.	{ 15 250	„
†Chakrata	6,885	„	Rawalpindi	1,707	„	†Maymyo	3,508	„
†Cherat	4,546	„	Rurki	884	„	Meiktila	860	„
†Dagshai	5,982	„	Sialkot	829	„	Mhow and Indore	{ 1,903 1,806	„
†Dalhousie Convalescent Depôt.	6,732	„	†Solon	5,166	„	Mount Abu Sanatorium	3,960	„
†Darjeeling ditto	7,168	„	†Subathu	4,124	„	Nasirabad	1,461	„
Delhi	715	„				Neemuch	1,613	„
Dinapore	171	„				Nowgong	770	I. B.
Dum-Dum . . . . .	...	„				Pachmarhi Sanatorium	3,481	S. G.
Fatehgarh	444	I. B.				Port Blair	85	„
Ferozepore	645	S. G.				Poona	1,909	„
Fort William	} 17	„	SOUTHERN ARMY—			Poonamalee Depôt	50	M. O.
Fulta and Chingrikhal			Aden	26	S. G.	Purandhar Sanatorium	4,560	S. G.
Fyzabad	336	„	Ahmednagar	2,125	„	†Quetta	5,511	„
†Gharial	6,811	„	Bangalore	3,021	„	Rangoon	14	„
Jullundur	900	„	Belgaum	2,473	„	Saugor	1,753	„
†Jutogh	6,371	„	Bellary and Ramandroog	1,483	„	Secunderabad	1,732	„
†Kalabagh and Baragali	{ 7,936 7,800	I. B. M. O.	Bhamo	351	„	Satara	2,183	„
†Kasauli Convalescent Depôt	6,320	S. G.	Cannanore	47	„	Shwebo	600	M. O.
†Khan Spur and Ghora Dhaka	7,500	M. O.	Calicut	27	M. D.	Thayetmyo	145	„
†Kuldana	7,049	S. G.	Malapuram	500	M. O.	†Wellington Convalescent Depôt.	6,160	„
Lahore Cantonment and Fort.	706	„	Colaba (Bombay)	20	S. G.			

* These heights are usually those of the survey-marks or of the mercury-surface in barometer-cisterns of meteorological observatories.

†† S. G. = Surveyor-General of India; I. B. = Intelligence Branch of the Division of the Chief of the Staff; M. D. = Meteorological Department; M. O. = Medical Officers in charge of Station Hospitals in their Sanitary Reports.

‡ Official Hill Stations and Hill Sanatoria and Convalescent Depôts.

EUROPEAN TROOPS, 1912.

TABLE I.

RATIOS OF ARMIES.

The ratios of admissions and deaths to strength are taken from Table III.

	RATIOS PER 1,000 OF THE AVERAGE STRENGTH.		
	Northern Army.	Southern Army.	India.
I.—STRENGTH	36,226	32,175	71,001
II.—CONSTANTLY SICK PER 1,000 OF THE AVERAGE STRENGTH	29'4	30'5	28'9
III.—ADMISSION RATE OF THE YEAR—			
Influenza	4'7	4'4	4'5
Cholera	'2	'3	'3
Small-pox	'3	'1	'2
Enteric Fever	3'1	2'1	2'6
Malaria	70'8	98'7	82'4
Sandfly Fever	52'4	7'6	30'5
Pyrexia of uncertain origin	22'7	19'6	21'2
Tubercle of the Lungs	1'5	1'0	1'2
Pneumonia	2'5	1'6	2'2
Respiratory Diseases	16'8	13'0	15'0
Dysentery	2'8	7'5	5'2
Diarrhœa	15'1	16'5	15'6
Hepatic Abscess	'6	'7	'7
„ Congestion and Inflammation	9'4	7'2	8'2
Venereal Diseases	52'9	60'1	55'5
ALL CAUSES	562'6	546'0	547'9
IV.—DEATH-RATE OF THE YEAR—			
Cholera	'11	'19	'14
Small-pox	'06	'03	'04
Enteric Fever	'52	'28	'39
Malaria	'14	'22	'17
Pyrexia of uncertain origin	'06	'03	'04
Heat-stroke	'28	'16	'21
Circulatory Diseases	'22	'25	'23
Tubercle of the Lungs	'28	'03	'15
Pneumonia	'36	'22	'28
Respiratory Diseases	'14	'03	'08
Dysentery	'25	'06	'15
Diarrhœa . . . . .	...	...	...
Hepatic Abscess	'36	'31	'32
ALL CAUSES	5'05	4'41	4'62

EUROPEAN TROOPS, 1912.

TABLE II.

RATIOS of GEOGRAPHICAL GROUPS.

The ratios of admissions and deaths to strength are taken from Table III.

RATIOS PER 1,000 OF THE AVERAGE STRENGTH.													
	I	II	IV	V	VI	VII	VIII	IX	X	XI	XIIa	XIIb	
	Burma Coast and Bay Islands.	Burma Inland.	Bengal and Orissa.	Gange- tic Plain and Chutia Nagpur.	Upper Sub- Hima- laya.	N.-W. Frontier, Indus Valley, and N.-W. Rajpu- tana.	S.-E. Rajpu- tana, Central India, and Gujarat.	Deccan.	Western Coast.	South- ern India.	Hill Stations.	Hill Conva- lescent Depôts and Sanato- ria.	India.
I.—STRENGTH	1,195	1,207	1,978	5,897	13,430	5,505	5,923	11,664	1,509	3,276	12,014	3,362	71,001
II.—CONSTANTLY SICK PER 1,000 OF THE AVERAGE STRENGTH . .	39'3	33'9	29'2	28'3	31'5	32'5	32'8	28'4	36'8	28'1	21'9	38'6	28'9
III.—ADMISSION RATE OF THE YEAR—													
Influenza . . . . .	...	...	...	6'3	7'2	3'4	5'1	1'9	4'0	19'9	2'2	1'7	4'5
Cholera . . . . .	...	...	'5	'3	'4	...	1'0	'4	...	...	...	...	'3
Small-pox . . . . .	...	...	...	'2	'4	'4	'7	...	...	'6	...	'3	'2
Enteric Fever . . . . .	...	...	3'0	7'1	2'6	'9	1'2	3'4	1'3	3'4	1'2	4'5	2'6
Malaria	76'2	55'5	38'4	30'7	95'0	154'8	111'9	94'7	118'0	76'3	52'7	84'5	82'4
Sandfly Fever . . . . .	...	...	3'5	28'5	66'5	148'6	9'5	14'4	...	2'1	2'0	'6	30'5
Pyrexia of uncertain origin .	226'8	47'2	17'7	48'2	17'4	25'6	6'4	13'1	4'0	5'8	12'5	11'3	21'2
Rheumatic Fever	'8	9'9	1'5	3'4	4'5	6'4	2'4	3'8	7'3	3'7	8'3	8'0	4'9
Tubercle of the Lungs . . .	2'5	'8	...	'7	1'7	'5	1'5	'9	'7	...	1'7	2'7	1'2
Pneumonia	'8	1'7	1'5	1'2	2'7	4'4	2'5	1'5	'7	'9	2'1	2'1	2'2
Respiratory Diseases . . .	7'5	14'1	13'1	10'9	17'2	21'4	17'7	11'7	13'9	11'0	16'3	14'9	15'0
Dysentery	'8	9'1	1'0	2'7	3'4	1'8	6'8	9'3	13'9	9'2	2'6	4'8	5'2
Diarrhœa	8'4	14'1	13'1	19'7	16'8	17'4	28'2	17'4	8'0	11'6	10'1	8'9	15'6
Hepatic { Abscess	'8	...	1'5	1'0	'4	'4	'5	'9	'7	'6	'7	'9	'7
{ Congestion and Inflammation .	15'1	5'8	9'6	7'8	8'8	5'3	19'9	6'1	6'6	6'4	5'3	12'8	8'2
Venereal Diseases	77'8	107'7	90'5	66'8	49'6	56'1	52'8	55'3	112'7	87'9	34'1	43'1	55'5
ALL CAUSES	719'7	553'4	463'6	498'0	640'2	793'3	621'8	507'4	522'2	631'0	392'5	514'3	547'9
IV.—DEATH RATE OF THE YEAR—													
Cholera . . . . .	...	...	...	'17	'22	...	'68	'17	...	...	...	...	'14
Small-pox . . . . .	...	...	...	...	'07	...	...	...	...	'31	...	'30	'04
Enteric Fever . . . . .	...	...	1'01	'68	'52	'36	'34	'34	...	'61	'17	'89	'39
Malaria . . . . .	...	'83	...	'17	'07	'36	'17	'34	...	...	'08	'30	'17
Pyrexia of uncertain origin .	'84	...	...	'17	'07	...	...	...	...	...	...	...	'04
Heat-stroke . . . . .	...	...	...	'17	'30	'36	'68	'34	...	...	...	...	'21
Circulatory Diseases . . .	2'51	'83	'51	'34	'07	...	'17	'09	'66	...	'33	...	'23
Tubercle of the Lungs . . .	...	...	'51	'17	'30	...	...	'09	...	...	'25	'30	'15
Pneumonia . . . . .	...	...	'51	...	'37	'54	'51	'17	'65	'31	'17	'30	'28
Respiratory Diseases . . .	'84	...	...	'17	...	'54	...	...	...	...	...	'30	'08
Dysentery . . . . .	...	...	...	'34	'37	...	'34	'09	...	...	...	'30	'15
Diarrhœa . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Hepatic Abscess . . . . .	...	...	1'52	'51	'15	'18	'51	'34	'66	'31	'17	'59	'32
ALL CAUSES	9'20	1'66	7'58	6'27	4'54	4'72	5'07	4'80	6'63	3'66	3'33	5'65	4'62

TABLE III.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.														2. DEATH RATE.								
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhoea.
Port Blair . . .	130	...	...	...	...	146'2	...	7'7	...	...	38'5	7'7	...	...	...	...	...	...	23'1	561'5	24'6	15'4	...	7'7
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7'69		...	...	...
Rangoon . . .	1,065	...	...	...	...	67'6	...	253'5	9	9	3'8	1'9	9	8'5	9	9'4	9	16'9	84'5	739'0	41'1	16'9	21'6	46'0
		...	...	...	...	...	...	94	...	...	2'82	...	...	94	...	...	...	...	...	9'39		...	...	...
GROUP I.— BURMA COAST AND BAY ISLANDS.	1,195	...	...	...	...	76'2	...	226'8	8	8	7'5	2'5	8	7'5	8	8'4	8	15'1	77'8	719'7	39'3	16'7	19'2	41'8
		...	...	...	...	...	...	84	...	...	2'51	...	...	84	...	...	...	...	...	9'20		...	...	...
Thayetmyo . .	171	...	...	...	...	35'1	...	128'7	...	...	5'8	5'8	...	17'5	...	...	...	17'5	99'4	491'2	32'9	11'7	17'5	70'2
	
Meiktila . . .	149	...	...	...	...	67'1	...	40'3	...	...	33'6	...	...	26'8	13'4	40'3	...	...	127'5	758'4	46'8	40'3	20'1	67'1
		...	...	...	...	67'1	...	...	...	...	...	...	...	...	...	...	...	...	...	6'71		...	...	...
Fort Dufferin (Mandalay).	226	...	...	...	...	110'6	...	8'8	4'4	...	35'4	...	4'4	4'4	4'4	8'8	...	8'8	150'4	606'2	41'4	8'8	35'4	106'2
		...	...	...	...	...	...	...	...	...	4'42	...	...	...	...	...	...	...	...	4'42		...	...	...
Shwebo . . .	561	...	...	...	...	25'0	...	48'1	16'0	...	10'7	...	...	10'7	14'3	16'0	...	1'6	80'2	493'8	26'6	5'3	14'3	60'6
	
Rhamo . . .	100	...	...	...	...	120'0	...	...	20'0	...	...	...	10'0	30'0	...	...	...	10'0	150'0	570'0	40'1	...	40'0	110'0
	
GROUP II.— BURMA INLAND.	1,207	...	...	...	...	55'5	...	47'2	9'9	...	16'7	8	1'7	14'1	9'1	14'1	...	5'8	107'7	553'4	33'9	10'8	21'5	75'4
		...	...	...	...	83	...	...	...	...	83	...	...	...	...	...	...	...	...	1'66		...	...	...
Forts William, Fulta and Chingri Khal.	1,243	...	8	...	4'8	31'4	...	10'5	8	...	3'2	...	8	7'2	8	2'4	8	5'6	108'6	453'6	29'5	7'2	41'0	60'3
		...	...	...	1'61	...	...	...	...	...	80	...	...	...	...	...	1'61	...	...	4'83		...	...	...
Dum-Dum . . .	337	...	...	...	...	32'6	...	8'9	3'0	...	8'9	...	3'0	32'6	3'0	35'6	3'0	17'8	89'0	400'6	29'0	5'9	23'7	59'3
		...	...	...	...	...	...	...	...	...	2'97	...	...	...	...	...	2'97	...	...	17'80		...	...	...
Barrackpore . .	398	...	...	...	...	65'3	17'6	47'7	2'5	...	5'0	...	2'5	15'1	...	27'6	2'5	15'1	35'2	532'7	28'1	17'6	2'5	15'1
		...	...	...	...	...	...	...	...	...	...	2'51	...	...	...	...	...	...	...	7'54		...	...	...
GROUP IV.— BENGAL AND ORISSA.	1,973	...	5	...	3'0	38'4	3'5	17'7	1'5	...	4'6	...	1'5	13'1	1'0	13'1	1'5	9'6	90'5	463'6	29'2	9'1	30'3	51'1
		...	...	...	1'01	...	...	...	...	...	5'1	5'1	5'1	...	...	...	1'52	...	...	7'58		...	...	...
B																								
Dinapore . . .	464	17'2	...	...	2'2	...	6'5	15'1	4'3	...	4'3	...	2'2	10'8	2'2	28'0	2'2	8'6	90'5	569'0	27'5	10'8	25'9	53'9
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6'47		...	...	...
Benares . . .	159	...	...	...	...	25'2	...	25'2	...	...	12'6	...	...	25'2	6'3	...	...	...	18'9	396'2	20'5	6'3	6'3	6'3
		...	...	...	...	...	...	...	...	6'29	...	...	...	...	...	...	...	...	...	6'29		...	...	...
Allahabad and Fort.	932	30'0	...	...	...	69'7	11'8	4'3	3'2	4'3	1'1	...	3'2	13'9	1'1	6'4	2'1	6'4	53'6	454'9	28'1	13'9	4'3	35'4
		...	...	...	...	1'07	...	...	...	...	...	...	...	1'07	...	...	1'07	...	...	5'36		...	...	...
Fyzabad . . .	881	1'1	...	...	30'6	17'0	...	36'3	1'1	2'3	3'4	1'1	...	11'4	2'3	31'8	1'1	20'4	74'9	507'4	35'3	10'2	6'8	57'9
		...	...	...	...	...	...	...	...	...	...	1'14	...	...	...	...	1'14	...	...	4'54		...	...	...
Lucknow . . .	2,375	...	...	4	5'5	24'8	59'8	72'0	4'2	...	4'2	4	1'3	9'7	3'8	23'2	8	6'7	66'5	515'4	28'5	10'1	17'7	38'7
		...	...	...	1'68	...	...	42	...	...	84	...	...	...	84	...	42	...	...	7'16		...	...	...
Cawnpore . . .	1,022	...	2'0	...	1'0	34'2	11'7	64'6	3'9	4'9	3'9	2'0	...	7'8	2'0	13'7	...	2'0	65'6	478'5	23'6	4'9	28'4	32'3
		...	98	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6'85		...	...	...
Fatehgarh . .	64	...	...	...	...	46'9	...	...	...	15'6	...	...	...	15'6	...	...	...	...	125'0	406'2	21'2	...	15'6	109'4
	
GROUP V.— GANGETIC PLAIN AND CHUTIA NAGPUR.	5,897	6'3	3	2	7'1	30'7	28'5	48'2	3'4	2'0	5'7	7	1'2	10'9	2'7	19'7	1'0	7'8	66'8	498'0	28'3	9'7	16'1	41'0
		...	17	...	68	17	...	17	...	17	34	17	...	17	34	...	51	...	...	6'27		...	...	...

EUROPEAN TROOPS, 1912.

TABLE III—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE.													
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhœa.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhœa.	
A																									
Bareilly . . .	1,294	16'2	...	...	1'5	24'0	...	3'9	3'9	8	12'4	8	4'6	23'2	1'5	8'5	...	13'9	52'6	358'6	20'5	13'1	7'0	32'5
		...	...	...	...	...	...	...	...	...	...	77	...	...	...	...	...	...	2'32	...		...	...
Rurki . . .	329	...	3'0	...	6'1	63'8	24'3	3'0	...	...	6'1	3'0	3'0	3'0	...	...	...	24'3	39'5	304'0	20'1	...	12'2	27'4
		...	3'04	...	30'4	...	...	...	...	...	...	...	...	...	...	...	...	...	6'08	...		...	...
Meerut . . .	2,169	5'1	1'4	5	3'2	23'5	161'8	9	9	11'1	6'5	2'3	2'8	20'3	9	13'4	...	6'0	38'7	564'8	30'0	8'3	1'8	28'6	
		...	46	...	46	...	...	...	92	...	46	46	...	...	...	46	...	...	6'92	...		...	...
Delhi. . . .	438	32'0	...	...	...	221'5	169'6	9'1	9'1	16'0	...	...	...	6'8	...	18'3	...	22'8	77'6	831'1	30'0	2'2	27'4	47'9
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4'57	...		...	...
Ambala . . .	2,995	...	...	1'0	4'8	28'2	6'2	10'0	4'8	5	9'5	1'9	1'0	20'0	7'6	11'0	1'9	10'0	54'4	505'5	35'2	6'7	7'2	40'6
		...	...	...	1'91	...	...	...	...	...	95	...	...	...	...	48	...	...	4'30	...		...	...
B																									
Jullundur . . .	544	...	...	1'8	...	91'9	1'8	14'7	...	3'7	9'2	1'8	1'8	11'0	1'8	11'0	...	5'5	88'2	575'4	34'4	7'4	9'2	71'7
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1'24	...		...	...
Ferozepore . . .	979	...	...	...	...	64'4	73'5	24'5	3'1	2'0	12'3	2'0	1'0	16'3	3'1	1'0	1'0	5'1	65'4	608'8	29'6	2'0	2'0	61'3
		...	...	1'02	...	...	...	...	...	...	1'02	...	...	10'2	...	...	...	...	5'11	...		...	...
Amritsar . . .	184	...	...	5'4	...	152'2	...	5'4	...	10'9	...	...	5'4	5'4	16'3	16'3	...	65'2	43'5	731'7	25'8	5'4	5'4	32'6
		...	...	...	...	...	...	...	...	...	...	...	...	10'87	...	...	...	...	16'30	...		...	...
Lahore Cantt. and Fort.	1,043	...	...	1'0	3'8	302'0	6'7	93'6	1'9	5'8	6'7	1'9	4'8	17'3	11'5	7'7	1'0	6'7	66'2	851'4	40'3	15'3	9'6	41'2
		...	...	...	...	96	...	96	...	96	96	...	96	...	...	...	...	...	6'71	...		...	...
Sialkot . . .	1,071	12'1	...	...	1'9	21'5	13'1	...	11'2	8'4	5'6	9	2'8	25'2	3'7	40'1	...	2'8	33'6	592'9	25'8	8'4	6'5	18'7
		...	...	...	93	...	...	...	93	...	...	...	...	1'87	...	...	...	...	6'54	...		...	...
Rawalpindi . . .	2,917	12'7	...	...	2'7	175'5	113'8	24'3	7'5	2'7	6'9	1'4	2'7	12'3	1'0	29'5	...	6'2	41'5	891'3	36'4	10'6	6'9	24'0
		...	...	...	...	...	...	...	...	...	...	34	...	...	...	...	...	...	1'71	...		...	...
Campbellpore . . .	222	...	...	...	...	31'5	63'1	...	...	...	9'0	4'5	4'5	22'5	...	13'5	...	...	18'0	414'4	12'4	4'5	...	13'5
			
Attock . . .	145	6'9	6'9	...	...	131'0	227'6	...	6'9	...	6'9	6'9	6'9	13'8	...	34'5	...	...	20'7	875'9	30'2	...	...	20'7
		...	6'90	...	...	...	...	...	...	...	...	6'90	...	...	...	...	...	...	13'79	...		...	...
GROUP VI.—UPPER SUB-HIMALAYA.		13,430	7'2	4	4	2'6	95'0	66'5	17'4	4'5	4'5	7'8	1'7	2'7	17'2	3'4	16'8	4	8'8	49'6	640'2	31'5	8'5	6'6	34'5
		...	22	07	52	07	...	07	...	30	07	30	37	...	37	...	15	...	...	4'54	...		...	...
A																									
Nowshera . . .	1,054	...	...	...	1'9	102'5	328'3	1'9	8'5	11'4	11'4	...	14'2	41'7	9	2'8	...	5'	54'1	934'5	29'4	18'0	4'7	31'3
		...	...	...	95	...	...	...	...	95	...	...	2'85	1'90	...	...	...	...	8'54	...		...	...
Peshawar . . .	1,724	1'2	...	...	6	276'1	255'7	31'2	9'3	2'9	9'3	6	2'9	29'6	1'7	41'2	...	7'0	58'6	1,163'6	44'1	5'8	8'1	44'7
		...	...	...	...	1'16	...	...	...	58	...	...	...	...	...	...	...	58	2'90	...		...	58	
Multan . . .	897	...	...	...	2'2	36'8	4'5	97'0	2'2	11'1	...	...	1'1	3'3	2'2	5'6	...	5'6	44'6	420'3	19'9	10'0	1'1	33'4
		...	...	...	1'11	...	...	...	...	...	...	...	1'11	...	...	1'11	...	...	6'69	...		...	...
C																									
Hyderabad . . .	523	7'6	...	1'9	...	84'1	13'4	...	...	3'8	...	...	3'8	19'1	7'6	7'6	...	1'9	51'6	455'1	25'6	...	17'2	34'4
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7'65	...		...	...
Karachi . . .	1,307	9'9	...	8	...	146'1	2'3	...	6'1	1'5	6'1	1'5	8	7'7	...	9'9	1'5	3'8	64'3	582'2	31'0	6'1	24'5	33'6	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1'53	...		...	...
GROUP VII.—N.-W. FRONTIER, VALLEY, AND N.-W. RAJ-PUTANA.		5,525	3'4	...	4	9	154'8	148'6	25'6	6'4	5'6	6'5	4'5	4'4	21'4	1'8	17'4	4	5'3	56'1	793'3	32'5	8'4	11'1	36'7
		...	...	...	36	36	...	...	...	36	...	...	54	54	...	...	18	...	18	4'72	...		...	18

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.														2. DEATH RATE.								
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhoea.
A																								
Deesa . . .	51	...	...	...	...	...	509'8	19'6	...	...	19'6	19'6	19'6	...	...	19'6	...	...	58'8	823'5	33'5	...	...	58'8
	
B																								
Neemuch . . .	438	29'7	...	...	...	105'0	4'6	4'6	...	2'3	2'3	2'3	2'3	22'8	6'8	22'8	...	11'4	36'5	470'3	18'0	20'5	...	16'0
		...	...	...	...	...	...	...	...	2'28	...	...	...	...	...	...	...	...	...	2'28	...	...	...	...
Nasirabad . . .	892	...	...	...	4'5	75'1	...	6'7	4'5	...	37'0	2'2	...	30'3	10'1	38'1	...	9'0	69'5	662'6	38'8	34'8	3'4	31'4
		...	...	...	1'12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3'36	...	...	...	...
Muttra . . .	449	...	...	...	...	98'0	...	...	8'9	46'8	2'2	4'5	2'2	20'0	...	8'9	...	26'7	89'1	531'3	29'6	6'7	2'2	80'2
		...	...	...	...	...	...	...	...	4'45	...	...	2'23	...	...	...	...	...	...	6'68	...	...	...	...
Agra . . .	872	10'3	...	4'6	...	59'6	3'4	1'1	1'1	13'8	9'2	1'1	3'4	9'2	1'1	1'1	...	52'8	70'0	529'8	29'3	4'6	18'3	47'0
		...	...	...	...	...	...	...	...	1'15	1'15	...	...	...	1'15	...	...	...	...	4'59	...	...	...	...
Jhansi . . .	1,027	...	5'8	...	1'0	97'4	15'6	...	3'9	1'9	4'9	...	2'9	27'3	14'6	63'3	1'0	24'3	49'7	865'6	142'9	13'6	8'3	27'3
		...	3'89	...	'97	'97	...	...	...	...	...	...	'97	...	'97	...	'97	...	...	11'68	...	...	...	...
Nawgong . . .	381	15'7	...	...	...	196'9	10'5	...	...	...	10'5	2'6	2'6	31'5	2'6	...	...	34'1	13'1	713'9	26'1	2'6	...	10'5
	
Mhow and Indore	1,813	1'1	...	...	1'1	153'9	2'8	15'4	'6	2'8	7'2	'6	2'8	6'1	6'1	28'7	1'1	5'0	41'4	529'5	31'5	11'6	3'3	25'5
		...	...	...	...	...	...	...	...	...	...	...	'55	...	...	...	1'10	...	...	3'86	...	...	...	...
GROUP VIII.— SOUTH-EAST RAJPUTANA, CENTRAL INDIA AND GUJARAT.	5,923	5'1	1'0	'7	1'2	111'9	9'5	6'4	2'4	6'9	11'1	1'5	2'5	17'7	6'8	28'2	'5	19'9	52'8	621'8	32'8	14'0	5'9	32'9
		...	'68	...	'34	'17	...	...	...	'68	'17	...	'51	...	'34	...	'51	...	...	5'07	...	...	...	...
A																								
Saugor . . .	26	...	...	...	...	192'3	...	...	...	...	...	...	...	...	...	...	...	...	...	307'7	15'4	...	...	...
	
Jubbulpore . . .	2,230	...	...	...	2'7	285'7	23'8	'4	3'1	6'7	10'3	...	1'8	9'0	5'4	17'0	'4	9'0	52'0	721'5	31'0	16'1	13'0	22'9
		...	...	...	'45	'90	...	...	...	'45	...	...	...	...	'45	...	'90	...	...	5'38	...	...	...	...
Kamptee and Sitabaldi . . .	962	...	...	...	1'0	64'4	13'5	1'0	1'0	4'2	2'1	2'1	...	13'5	3'1	13'5	1'0	8'3	62'4	465'7	23'4	16'6	6'2	39'5
		...	...	...	...	...	...	...	...	1'04	...	1'04	...	...	...	...	...	1'04	...	7'28	...	...	...	...
B																								
Secunderabad . . .	3,195	4'7	'3	...	5'0	19'4	...	1'6	5'6	'3	5'0	'6	'6	10'6	9'4	12'5	'9	3'4	64'2	498'3	28'6	2'3	4'1	39'7
		...	'31	...	'94	'31	...	...	...	'63	'31	...	'31	...	...	...	'31	...	...	6'88	...	...	...	...
Belgaum . . .	1,090	1'8	...	...	3'7	22'9	...	11'0	...	...	1'8	2'8	'9	8'3	7'3	23'9	'9	2'8	50'5	264'2	17'8	7'3	13'8	29'4
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3'67	...	...	...	...
Satara . . .	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	
Poona . . .	2,061	2'4	1'5	...	5'3	85'4	49'0	53'4	2'9	...	7'8	'5	2'4	11'2	4'4	26'7	1'5	8'2	43'7	506'1	33'0	10'2	4'9	28'6
		...	'49	...	...	'49	...	...	...	...	...	...	'49	...	...	...	'49	...	...	3'88	...	...	...	...
Kirkee . . .	1,065	...	...	...	'9	76'1	...	16'0	6'6	...	1'9	2'8	2'8	4'7	34'7	5'6	...	10'3	67'6	401'9	29'7	8'5	11'3	47'9
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1'88	...	...	...	...
Ahmednagar	1,012	...	1'0	...	1'0	56'3	1'0	6'9	4'9	...	9'9	...	3'0	31'6	8'9	24'7	1'0	1'0	46'4	527'7	22'1	20'8	6'9	18'8
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	'99	...	...	...	...
GROUP IX.— DECCAN.	11,664	1'9	'4	...	3'4	94'7	14'4	13'1	3'8	1'7	6'1	'9	1'5	11'7	9'3	17'4	'9	6'1	55'3	597'4	28'4	15'1	7'9	32'3
		...	'17	...	'34	'34	...	...	...	'34	'09	'09	'17	...	'09	...	'34	'09	...	4'80	...	...	...	...

EUROPEAN TROOPS, 1912.

TABLE III—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.														2. DEATH RATE.									
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhoea.	
Colaba . . .	1,192	5'0	...	...	1'7	146'8	...	5'0	4'2	...	5'0	'8	'8	16'8	17'6	10'1	'8	7'6	120'0	590'6	44'4	21'0	42'8	56'2
		...	...	...	...	...	...	...	...	...	'84	...	'84	...	...	...	'84	...	...	8'39		...	...	...
Cannanore . .	93	...	...	...	...	10'8	...	...	10'8	...	10'8	...	...	10'8	...	...	...	...	150'5	397'8	11'4	32'3	53'8	64'5
		
Calicut . . .	89	...	...	...	...	...	...	...	44'9	...	...	...	...	...	...	...	...	...	101'1	292'1	12'5	44'9	11'2	44'9
		
Mallapuram . .	135	...	...	...	...	14'8	...	...	7'4	...	7'4	...	...	...	...	...	...	7'4	29'0	155'6	3'7	...	...	29'6
		
GROUP X.— WESTERN COAST.	1,509	4'0	...	...	1'3	118'0	...	4'0	7'3	...	5'3	'7	'7	13'9	13'9	8'0	'7	6'6	112'7	522'2	36'8	21'2	37'8	53'7
		...	...	...	...	...	...	...	...	...	'66	...	'66	...	...	...	'66	...	...	6'63		...	...	...
A																									
Bellary . . .	456	6'6	...	4'4	2'2	171'1	...	6'6	2'2	...	6'6	...	2'2	13'2	4'4	4'4	2'2	4'4	63'6	706'1	29'6	17'5	15'4	30'7	
		...	...	2'19	...	...	...	...	...	...	...	...	...	...	...	...	2'19	...	...	8'77		...	...	...
Bangalore . .	2,158	27'8	...	...	4'6	45'9	...	2'3	4'2	...	11'1	...	'9	9'7	11'1	13'9	'5	5'6	81'6	565'3	29'8	14'4	13'4	53'8
		...	...	...	'93	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1'39		...	...	...
B																									
Madras and St. Thomas' Mount.	662	3'0	...	...	...	110'3	10'6	16'6	3'0	16'6	3'0	...	...	13'6	6'0	9'1	...	10'6	125'4	793'1	21'3	24'2	18'1	83'1
		1'51	1'51	7'55		...	1'51
GROUP XI.— SOUTHERN INDIA.	3,276	19'9	...	'6	3'4	76'3	2'1	5'8	3'7	3'4	8'9	...	'9	11'0	9'2	11'6	'6	6'4	87'9	631'0	28'1	16'8	14'7	56'5	
		'31	'61	'31	'31	...	'31	3'66		...	'31
Rarikhet and Chaubuttia.	1,601	2'5	...	...	1'2	10'0	...	'6	6'9	...	1'2	1'2	3'7	22'5	...	1'2	'6	15'0	21'2	176'1	9'3	6'9	1'9	12'5
		...	...	...	'62	...	...	...	...	...	...	...	'62	...	...	...	...	...	...	2'50		...	...	...
Chakrata . . .	1,172	9'4	...	...	'8	8'5	'8	7'7	5'1	...	7'7	1'7	'8	11'9	3'4	10'2	'8	11'9	49'5	344'7	18'0	18'8	4'3	26'4
		...	...	...	...	...	...	...	...	...	'85	'85	...	...	...	...	...	...	...	4'27		...	...	...
Lebong . . .	638	...	...	...	1'6	20'4	...	1'6	1'6	...	3'1	...	4'7	26'6	12'5	17'2	...	3'1	61'1	315'0	22'1	7'8	17'2	36'1
		...	...	...	1'57	...	...	...	...	...	1'57	...	...	...	...	...	...	...	...	4'70		...	...	...
Solon . . .	249	...	...	...	...	16'1	...	64'3	4'0	...	...	...	...	4'0	4'0	8'0	...	4'0	56'2	337'3	18'8	8'0	...	48'2
		
Dagshai . . .	744	1'3	...	...	1'3	18'8	...	4'0	5'4	...	5'4	...	2'7	14'8	1'3	4'0	1'3	1'3	24'2	306'5	26'8	2'7	5'4	16'1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1'4	...	...	5'38		...	...	...
Subathu . . .	450	...	...	...	...	60'0	...	33'3	11'1	...	15'6	22'2	...	15'6	...	...	...	4'4	22'2	662'2	41'8	4'4	...	17'8
		...	...	...	...	...	...	...	...	...	...	2'22	...	...	...	...	...	...	...	2'22		...	...	...
Jutogh . . .	355	...	...	...	...	14'1	2'8	22'5	...	...	5'6	...	...	5'6	2'8	5'6	5'2	2'8	73'9	323'9	13'8	...	64'8	14'1
		...	...	...	...	...	...	...	...	...	2'82	...	...	...	...	...	2'82	...	...	5'63		...	...	...
Kalabagh and Baragali.	112	35'7	...	...	8'9	17'9	...	17'9	8'9	...	...	...	...	8'9	...	44'6	...	8'9	...	392'9	18'2	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8'93		...	...	...
Kuldana . . .	461	...	...	...	...	30'4	...	21'7	2'2	...	4'3	4'3	...	2'2	...	...	...	4'3	28'2	386'1	15'9	6'5	...	21'7
		
Camp Gharial.	676	...	...	...	...	31'1	...	20'7	13'3	1'5	4'4	...	3'0	26'6	4'4	4'4	...	...	22'2	360'9	12'9	8'9	5'9	7'4
		...	...	...	...	...	...	...	...	...	...	...	1'48	...	...	...	...	...	...	1'48		...	...	...
Camp Barian and Khairagali.	529	...	...	...	11'3	34'0	...	7'6	5'7	1'9	22'7	1'9	1'9	41'6	3'8	13'2	...	3'8	35'9	493'4	46'8	17'0	7'6	11'3
		1'89	1'89		...	1'89
Khan Spur and Ghora Dhaka.	358	...	...	...	2'8	8'4	...	16'8	8'4	...	41'9	2'8	...	11'2	5'6	8'4	...	5'6	53'1	382'7	21'1	22'3	5'6	25'1
		...	...	...	...	...	...	...	...	...	...	2'79	...	...	...	...	...	...	...	5'59		...	...	...

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.														2. DEATH RATE.									
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases.	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhoea.	
Cherat . . .	496 {	...	...	...	2'0	92'7	34'3	10'1	6'0	...	24'2	...	4'0	8'1	...	42'3	2'0	6'0	22'2	806'5	} 27'5	4'0	...	18'1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4'03		...	...	...
Quetta . . .	3,515 {	1'7	...	...	'3	90'2	1'4	14'2	13'1	...	6'0	'9	2'3	12'2	1'1	7'4	'9	2'3	27'9	373'3	} 20'8	8'3	3'4	16'2
		...	...	...	...	'28	...	...	...	...	'28	...	...	...	...	...	...	...	...	3'41		...	...	...
Maymyo . . .	658 {	1'5	...	...	...	186'9	...	9'1	9'1	4'6	31'9	...	...	22'8	7'6	36'5	...	1'5	51'7	800'9	} 40'7	9'1	9'1	33'4
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3'04		...	...	...
GROUP XIIa. HILL STATIONS.	12,014 {	2'2	...	...	1'2	52'7	2'0	12'5	8'3	'4	9'3	1'7	2'1	16'3	2'6	10'1	'7	5'3	34'1	392'5	} 21'9	8'9	6'2	19'1
		...	...	...	'17	'08	...	...	...	...	'33	'25	'17	...	...	...	'17	...	'08	3'33		'08	...	...
Darjeeling . . .	316 {	...	...	...	...	28'5	...	63'3	...	...	...	...	...	15'8	6'3	22'2	...	6'3	104'4	446'2	} 28'8	31'6	15'8	57'0
		
Naini Tal . . .	201 {	...	...	...	14'9	29'9	...	5'0	24'9	...	39'8	5'0	...	29'9	...	34'8	...	29'9	94'5	671'6	} 48'4	49'8	19'9	24'9
		...	...	...	...	...	...	...	...	...	...	...	...	4'98	...	...	...	...	...	9'95		...	...	...
Landour . . .	200 {	...	...	5'0	5'0	5'0	...	5'0	10'0	...	...	10'0	...	...	...	...	...	10'0	20'0	285'0	} 21'8	10'0	...	10'0
		...	...	5'00	...	...	...	...	...	...	...	5'00	...	...	...	...	...	...	...	10'00		...	...	...
Kasauli . . .	377 {	...	...	...	...	103'4	...	10'6	10'6	...	21'2	8'0	2'7	26'5	13'3	10'6	2'7	...	42'4	559'7	} 78'6	29'2	2'7	10'6
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2'65	...	...	7'95		...	...	...
Dalhousie . . .	632 {	...	...	...	6'3	74'4	...	3'2	1'6	...	6'3	1'6	3'2	14'2	1'6	7'9	1'6	3'2	38'0	378'2	} 25'7	12'7	...	25'3
		...	...	...	1'58	...	...	...	...	...	...	...	1'58	...	...	...	1'58	...	...	4'75		...	...	...
Murree . . .	358 {	16'8	...	...	8'4	69'8	5'6	16'8	2'8	8'4	11'2	...	...	14'0	2'8	...	...	22'3	11'2	497'2	} 57'9	5'6	2'8	2'8
		...	...	...	2'79	2'79	...	...	...	...	...	...	...	...	2'79	...	...	...	...	19'55		...	...	...
Mount Abu . . .	141 {	...	...	...	7'1	340'4	...	...	...	...	7'1	...	...	7'1	14'2	...	...	28'4	14'2	539'0	} 22'9	...	...	14'2
		...	...	...	7'09	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7'09		...	...	...
Pachmarhi . . .	119 {	...	...	...	...	302'5	...	...	...	...	...	...	...	8'4	...	8'4	...	33'6	16'8	621'8	} 21'3	...	8'4	8'4
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8'40		...	...	...
Prandhar . . .	82 {	...	...	...	...	109'8	...	48'8	12'2	...	24'4	...	24'4	12'2	12'2	48'8	...	24'4	97'6	1,402'4	} 56'1	73'2	...	24'4
		
Khandalla . . .	41 {	...	...	...	...	195'1	...	...	24'4	...	24'4	...	24'4	...	48'8	24'4	24'4	24'4	48'8	609'8	} 29'8	24'4	24'4	...
		
Wellington . . .	895 {	...	...	...	3'4	62'6	...	...	13'4	...	13'4	2'2	1'1	13'4	2'2	1'1	...	13'4	34'6	534'1	} 31'7	6'7	5'6	22'3
		
GROUP XIIb.— Hill Covale-scent Depôts and Sanatoria.	3,362 {	1'7	...	'3	4'5	84'5	'6	11'3	8'0	'5	11'9	2'	2'1	14'9	4'8	8'9	'9	12'8	43'1	514'3	} 38'6	16'7	5'4	21'1	
		...	...	'30	'89	'30	...	...	...	...	...	'30	'30	'30	'30	...	'59	...	...	5'65		...	...	...

EUROPEAN TROOPS, 1912.

TABLE III—concluded.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND ARMIES.	Average annual strength.	1. ADMISSION RATE.														2. DEATH RATE.									
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhoea.	
Troops marching.	2,600	1'9	...	'4	'4	40'4	6'9	19'6	'4	'8	4'6	...	4'2	13'1	11'2	12'7	...	5'0	36'2	367'3	1'4	5'8	6'5	23'8	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1'15		...	...	...
Deolali Depot	410	...	...	...	...	148'8	...	...	...	...	2'4	...	14'6	9'8	14'6	2'4	12'2	73'2	522'0	28'9	17'1	9'8	46'3	
		
Poonamallee Depot	108	27'8	...	...	...	9'3	18'5	...	9'3	...	...	...	9'3	9'3	9'3	...	...	9'3	287'0	842'6	283'5	194'4	...	92'6
		...	...	...	...	...	...	...	...	...	...	9'26	...	...	...	...	...	...	...	18'52		...	...	...
EXTRA INDIA. Aden	923	...	...	...	3'3	26'0	...	31'4	9'8	13'0	3'3	1'1	1'1	13'0	5'4	10'8	...	2'2	49'8	426'9	25'2	4'3	4'3	41'2
		...	...	...	...	...	...	...	...	1'08	...	...	...	...	...	...	1'08	...	...	4'33		...	...	...
INDIA	71,001	4'5	'3	'2	2'6	82'4	30'5	21'2	4'9	2'8	7'6	1'2	2'2	15'0	5'2	15'6	'7	8'2	55'5	547'9	28'9	11'6	9'9	34'0	
		...	'14	'04	'39	'17	...	'04	...	'21	'23	'15	'28	'08	'15	...	'32	'01	'04	4'62		...	'03	...	'01
		'1	'0	'0	'4	3'0	'6	'8	'4	'1	'7	'4	'3	'6	'4	'4	'1	'5	7'1	28'9	...	1'5	'9	4'6	
NORTHERN ARMY	36,226	4'7	'2	'3	3'1	70'8	52'4	22'7	4'9	3'8	7'4	1'5	2'5	16'8	2'8	15'1	'6	9'4	52'9	562'6	29'4	9'6	9'6	33'6	
		...	'11	'06	'52	'14	...	'06	...	'28	'22	'28	'36	'14	'25	...	'36	...	'c6	5'05		...	'03	...	'03
SOUTHERN ARMY	32,175	4'4	'3	'1	2'1	98'7	7'6	19'6	5'4	1'8	8'2	1'0	1'6	13'0	7'5	16'5	'7	7'2	60'1	546'0	30'5	14'3	10'5	35'3	
		...	'19	'03	'28	'22	...	'03	...	'16	'25	'03	'22	'03	'06	...	'31	'03	'03	4'41		...	'03
Lucknow*	2,375	...	...	'0	'4	'6	1'1	2'4	'4	...	'6	'0	'0	'5	'2	'7	'3	'4	10'1	28'5	28'5	2'2	1'3	6'6
Meerut*	2,169	'2	'1	'1	'4	2'0	3'2	'2	'2	'5	'4	'5	2'6	'7	'1	'4	'1	'4	5'1	30'0	30'0	'6	'1	4'3	
Ambala*	2,095	...	...	'1	'8	1'7	'3	'7	'7	'1	'9	'2	'3	'7	'6	'3	'1	'6	12'3	36'2	36'2	1'7	1'3	9'2
Rawalpindi*	2,917	'3	...	...	'6	6'0	1'8	1'3	'3	'3	'6	1'0	'2	'4	'0	'5	...	'4	4'6	36'4	36'4	1'6	'4	2'7
Jubbulpore*	2,230	...	...	...	'4	7'0	'5	'0	'3	'1	'8	'0	'2	'8	'7	'5	'0	'7	7'7	34'0	34'0	2'2	1'3	4'1
Secunderabad*	3,195	'2	'0	...	'8	'8	...	'1	'4	...	'4	'1	'1	'4	'5	'3	'1	'2	8'5	28'6	28'6	2'6	'6	5'3	
Poona*	2,061	'1	'1	...	'9	3'9	'9	1'3	'4	...	'9	'6	'3	'5	'4	'7	'1	'7	8'2	33'0	33'0	1'6	1'0	5'5	
Bangalore*	2,158	'7	...	...	'8	1'5	...	'1	'4	...	1'0	'0	'1	'4	'5	'3	'0	'3	7'9	29'8	29'8	1'1	'9	6'0
Quetta*	3,515	'0	...	...	'2	3'5	'0	'5	1'2	...	'5	'3	'2	'7	'1	'2	'2	'1	3'3	20'8	20'8	1'0	'4	2'0

*Constantly sick rate per 1,000 by diseases at the largest stations.

EUROPEAN TROOPS, 1912.

TABLE IV.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS AND SANITARY DEFECTS.

(The ratios of sickness and mortality will be found in Table III.)

NORTHERN ARMY.

Peshawar.—The surface drainage is unsatisfactory.

The conservancy system in force in latrines and urinaries is partly removal and partly incineration. Sewage is trenched when it cannot be disposed of by incineration.

The General Officer Commanding Peshawar Infantry Brigade remarks that the principal diseases have been sandfly fever and malaria. The anti-malaria measures adopted have been beneficial.

Drainage in parts of the Cantonment is defective. The improvement and lining of drains have been carried out systematically as far as funds are available. Grass farm lands and over-irrigation should be restricted as much as possible.

Regimental and Sudder bazars are overcrowded, and placing these on a proper footing is a matter of importance.

The curtailment of irrigation is said to be a sacrifice of the aesthetic efforts which are the chief charms of the station, and making *pucca* most of the irrigation channels is recommended, also as much money as possible should be devoted to the re-grading and rendering *pucca* of irrigation channels. Many of the houses occupied by officers are in a very bad condition.

Lahore Cantonment.—The surface drainage of the Sudder bazar is now being gradually improved. There are a number of brick-fields in the immediate vicinity; these, together with excavation pits from which *kunkar* is removed and also the existence of disused wells, furnish numerous breeding grounds for mosquitos.

There are difficulties in drainage in the Sudder bazar owing to want of a sufficient fall. There is a large tank in the British Infantry bazar which forms a breeding ground for mosquitos in the rains.

The excreta from British units is removed to trenching grounds, which are just outside the Cantonment boundary.

The Assistant Director of Medical Services, 3rd (Lahore) Division, remarks that the principal sanitary defects in Lahore Cantonment are :—

- (a) Bad surface drainage, owing to which the storm water instead of being rapidly carried off, lies until removed by evaporation. The existence of numerous pits and depressions in which water accumulates and a large number of disused wells.

To remedy these defects improved drainage, levelling up depressions, etc., which can not be drained, and covering permanently disused wells are required.

- (b) In the Royal Artillery and Ammunition Column barracks three rows of sleepers are accommodated instead of two, as formerly. This constitutes overcrowding in the still, hot climate of Lahore Cantonment, although the floor and cubic space are on a scale which is found sufficient in stations where there is free movement of air and consequently good ventilation.

- (c) During the cold season, when the families of the European troops are present, the milk supplied by the Government Dairy should be pasteurized. In the hot season pasteurization is not always possible owing to the scarcity of water and the high temperature.

Incineration of excreta is required for British troops and for all hospitals. The General Officer Commanding 3rd (Lahore) Division agrees with the above and remarks that steps are still being taken to remedy the defects noted.

SOUTHERN ARMY.

Jhansi.—The surface drainage is fairly satisfactory, except where burrow pits have been left. The *nullahs* running through Cantonment at the lower parts of the station are practically pools of stagnant water for the greater part of the year, but cannot be remedied without excessive cost, although the anti-malarial gang do all they can.

The quantity of water during the hot season is very restricted in several parts of the station, and deficient especially in the Royal Artillery lines and Sudder bazar, causing great inconvenience.

A Cantonment grain market will be a distinct advantage, in the absence of which great inconvenience is felt on the occasion of the city being placed out of bounds.

Colaba.—The Cantonment Committee remark that some new quarters for Indian followers of British troops are under construction in proximity to one of the bazars and it is understood that the bazar itself will be dealt with shortly.

The removal system of dealing with excrement is to be modified shortly by the erection of hoppers in connection with the main sewer. It is proposed to gradually bring latrines and urinals into connection with the sewer system.

The Assistant Director of Medical Services, Bombay Brigade, concurs with the following suggestions of the Cantonment Committee :—

1. The existing Detail Lines are quite unfit for occupation and should be re-built.
2. The Carnegy Lines are badly constructed, difficult to keep clean, and in far too close proximity to the town and a large tank which contains filthy water.
3. Water should be laid on to the hospital in Carnegy Lines and a proper washing place erected, the hospital dispensary should have a sink.
4. The servants' latrine in certain bungalows in Queen's Road are unsatisfactory and should be reconstructed.

Maymyo.—There are several *kutchas* drains that are unsatisfactory. There is plenty of marshy ground around the lines which breed large numbers of anopheline mosquitos.

The Dhoobie village is too near the barracks and should be located on some other site.

The Cantonment Committee remark that the present site of the Dhobies' quarters (British Infantry) will be vacated, and new quarters constructed before 31st March 1913 on a site to be selected by the Officer Commanding the Station Hospital and approved of by the Committee.

A certain amount of jungle-clearing behind the officers' quarters, British Infantry, Cantonment, will be carried out before 31st March 1913. The money available is very little but it is a start. In future more jungle-clearing will be taken up.

The Assistant Director of Medical Service, Burma Division, remarks that investigations carried out in 1912 have proved that there is a moderate amount of initial malaria throughout the Cantonment. Practically all the sanitary defects calling for removal are connected with the reduction of malaria. These are chiefly :—

1. Use of mosquito nets by all troops and followers from 15th March to 30th November.
2. Drainage of the swamps in and around the British Infantry lines and to the west of the Indian Infantry lines.
3. Grading rough canalization and freeing from grass, weeds and aquatic vegetation generally all natural and artificial water channels around the British Infantry lines and of the water-way to the north of the Indian Infantry lines.

TABLE IV—*concluded.*

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS AND SANITARY DEFECTS.

(The ratios of sickness and mortality will be found in Table III.)

SOUTHERN ARMY.

4. Keeping down all jungle and grass in and around the British Infantry lines.
5. Denudation of trees in and around the British Infantry lines to the extent of 25 per cent.

Of the above 1, 3 and 4 are of greatest importance. Night-soil incineration should be introduced throughout the Cantonment.

The General Officer Commanding, Mandalay Brigade, concurs in the above remarks and that the suggestions will be carried out as funds become available.

Mandalay.—The Assistant Director of Medical Services, Burma Division, considers that the more pressing sanitary requirements are :—

1. Repairs of the *pucca* drains just within the walls of Fort Dufferin on the south and west sides; maintaining a constant flow of water in these drains by proper grading (if necessary), keeping them free from deposit and vegetable growth.
2. The pipes of the bathing water-supply for the British Infantry lines should be continued to the cisterns connected with the wash-houses. It is desirable to provide larger cisterns than those now in use.
3. The drainage scheme of Fort Dufferin, as planned by the special committee and Sanitary Engineer, detailed in their report, dated 1911, should be carried out piece-meal year by year until it is completed.
4. The Dhobe ghât of the British Infantry lines should be put in a proper state of repair.
5. Night-soil incinerators (preferably of the Ambala B type) should be provided in the British lines.

The Officer Commanding, Mandalay Brigade, is convinced that all the suggestions put forward will be kept in view and carried out as funds become available.

The drainage of Fort Dufferin is a very big and difficult question owing to there being little fall in any direction and the Fort being surrounded by a moat.

The drain complained of as being insanitary is periodically flushed by convict labour from the jail pumps.

Rangoon.—The Assistant Director of Medical Services, Burma Division, remarks that the more important sanitary requirements are :—

1. Properly constructed Dhobie ghâts. The present primitive arrangements are highly objectionable, and to them is largely attributable the unusual prevalence of ringworm amongst the troops.
2. Removal or greatly improving the sanitary condition of the Bohi bazar. This bazar in its present condition is a perpetual menace to the health of the troops.
3. Construction of cow-sheds in a conveniently accessible locality in connection with the milk supply of British troops.
4. Removal by drainage and filling up of the large number of breeding places of mosquitos in and around the Cantonment.

EUROPEAN TROOPS, 1912.

TABLE V.

ENTERIC FEVER by months,
stations, groups, and armies.

TABLE VI.

MALARIA by months, stations,
groups, and armies.

TABLE VII.

PYREXIA OF UNCERTAIN ORIGIN by
months, stations, groups, and armies

STATIONS* AND GROUPS.	ADMISSIONS FROM ENTERIC FEVER, IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.															
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	
Port Blair	2	1	2	2	6	2	...	2	2	...	19	1	1
Rangoon	39	4	6	4	2	...	2	1	2	2	5	5	72	5	5	8	11	52	78	24	15	37	21	11	3	270	
GROUP I.—BURMA COAST AND BAY ISLANDS	41	5	8	4	2	2	8	3	2	4	7	5	91	5	5	8	12	52	78	24	15	37	21	11	3	27	
Thayetmyo	1	...	...	...	...	...	2	1	...	...	2	6	1	...	...	...	1	6	8	2	1	2	1	...	22		
Meiktila	3	...	...	...	1	...	2	2	10	...	...	...	1	...	1	2	1	...	...	1	...	6		
Fort Dufferin (Mandalay)	4	1	1	...	1	1	1	3	4	2	3	4	25	...	1	1	2	
Shwebo	2	...	1	2	2	1	...	...	...	4	2	14	1	2	...	...	5	3	1	1	...	5	7	2	27		
Bhamo	3	9	12	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP II.—BURMA INLAND	7	1	2	5	3	2	1	6	5	4	12	19	67	2	3	1	1	6	10	11	4	1	7	9	2	57	
Fort William, Fulta and Chingrikhal	...	4	2	...	...	...	...	...	...	...	...	...	6	9	1	1	4	1	1	1	1	4	6	5	5	39	3	3	1	...	...	...	...	...	...	4	2	13
Dum-Dum	1	...	1	2	...	1	...	...	3	2	1	11	1	...	...	...	...	1	...	...	...	...	...	...	3		
Barrackpore	4	...	1	1	...	2	3	6	2	5	26	1	...	...	1	1	3	4	3	2	1	...	3	19		
GROUP IV.—BENGAL AND ORISSA	...	4	2	...	...	...	...	...	...	...	...	...	6	10	5	2	7	2	2	3	4	10	11	9	76	5	3	1	1	1	4	4	3	3	1	4	5	35
B		
Dinapore	1	1	2	...	1	1	2	1	7	
Benares	2	2	...	...	...	...	...	...	...	...	3	...	...	1	...	...	...	...	...	...	4		
Allahabad and Fort	7	3	3	...	2	8	11	3	5	8	8	7	65	1	...	...	...	...	...	...	...	...	...	2	4		
Fyzabad	...	9	1	8	1	2	1	2	...	3	27	1	...	1	...	1	3	3	5	1	15	3	2	10	5	4	2	...	1	1	2	2	...	32	
Lucknow	...	2	3	1	1	...	2	2	2	13	2	3	1	4	3	1	2	9	1	5	1	27	59	4	17	16	11	13	13	10	7	22	18	29	11	171	
Cawnpore	...	1	1	3	2	...	5	3	3	1	3	3	7	5	...	35	2	1	1	13	17	11	6	7	7	1	66	
Fatehgarh	1	...	1	1	3	
GROUP V.—GANGETIC PLAIN AND CHUTIA NAGPUR	...	12	4	9	2	2	3	5	2	3	...	42	13	8	5	11	10	15	14	16	12	23	19	35	181	13	19	29	19	18	28	29	21	29	27	38	14	284		
A	
Bareilly	1	1	2	2	1	1	1	4	1	...	2	15	4	31	4	1	5	
Rurki	1	1	2	1	...	2	1	3	6	6	1	1	21	1	1	
Meerut	1	4	1	...	...	...	...	...	1	7	2	3	7	4	2	2	3	6	5	6	9	51	...	...	...	1	...	...	...	...	...	...	1	...	2		
Delhi	1	2	1	2	2	3	12	4	21	28	97	4	4	
Ambala	...	2	1	1	2	2	...	...	1	1	...	10	8	9	4	7	2	1	...	3	6	5	12	2	59	5	...	...	1	1	...	1	2	...	5	...	6	21
B	
Jullundur	4	2	8	3	2	3	7	9	2	2	5	3	50	...	...	...	...	...	...	...	1	3	3	1	8		
Ferozepore	3	2	2	...	4	4	3	1	14	17	9	4	63	3	4	6	3	4	...	2	1	1	...	24	
Amritsar	2	1	2	3	5	11	4	28	1	1	
Lahore Cantt. and Fort	...	1	...	...	...	...	...	...	1	1	1	4	7	1	2	4	4	8	7	11	103	81	64	18	315	2	3	1	2	11	6	20	12	23	12	4	1	97
Sialkot	1	1	...	...	...	...	...	...	...	2	2	...	1	...	1	...	...	3	11	2	1	2	23	...	...	...	...	...	...	...	...	...	...	...	...	...
Rawalpindi	...	1	2	2	1	1	...	1	...	...	...	8	40	21	21	17	27	14	15	66	131	78	51	31	512	...	2	21	3	3	5	2	...	1	...	...	5	71
Campbellpore	2	...	1	...	...	...	3	...	1	7	...	...	...	...	...	...	...	...	...	...	...	...	...
Attock	2	3	...	...	...	...	...	...	6	6	2	19	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP VI.—UPPER SUB-HIMALAYA	2	2	3	5	10	4	2	3	1	3	35	70	44	49	39	45	38	43	117	290	234	212	95	1,276	7	5	25	44	23	14	31	15	27	21	9	13	234	
Nowshera	1	...	...	...	1	...	...	...	2	17	6	10	1	...	1	...	5	5	18	41	4	108	...	...	...	1	...	...	...	1	...	...			

* Stations where neither enteric fever nor malaria nor pyrexia of uncertain origin occurred are not shown in these tables. For the annual ratios see Table III.

EUROPEAN TROOPS, 1912.

TABLE V—concluded. TABLE VI—concluded. TABLE VII—concluded.

*ENTERIC FEVER by months, stations,
groups, and armies.*

*MALARIA by months, Stations,
groups, and armies.*

PYREXIA OF UNCERTAIN ORIGIN
by months, stations, groups, and armies.

STATIONS* AND GROUPS.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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GROUP VIII.—SOUTH EASTERN RAJ-PUTANA, CENTRAL INDIA, AND GUJARAT														24	27	38	26	17	27	48	117	143	93	77	26	663	2	1	1		2	2	1	3	9	4	12	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														</

* Stations where neither enteric fever nor malaria nor pyrexia of uncertain origin occurred are not shown in these tables. For the annual ratios, see Table III.

STATIONS,* GROUPS AND ARMIES.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.													ADMISSIONS FROM MALARIA IN EACH MONTH.													ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.													
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	
Troops marching .	1	...	...	...	...	...	...	...	...	...	...	...	1	5	4	2	...	...	...	...	...	...	12	62	20	105	7	...	1	2	..	...	...	...	...	11	22	8	51
Deolali Depôt	8	11	6	4	2	7	8	10	3	...	1	1	61
Poonamallee Depôt.	1	1
EXTRA INDIA.																																								
Aden	1	...	...	1	...	...	1	...	...	...	...	...	3	2	2	2	3	1	5	5	...	...	...	3	1	24	2	2	...	...	1	4	4	3	3	6	2	2	29
INDIA	8	13	22	20	29	12	8	18	19	19	7	7	82	347	236	264	260	229	289	409	617	899	948	876	473	5,847	62	49	103	155	168	183	163	118	168	154	128	55	1,566	
NORTHERN ARMY .	3	7	18	15	24	10	3	9	9	7	4	4	113	144	85	93	101	96	101	117	216	439	479	473	222	2,566	31	29	68	90	85	75	110	69	90	81	62	33	823	
SOUTHERN „ .	4	6	4	5	5	2	5	9	10	12	3	3	68	198	147	169	159	133	188	292	401	460	457	341	231	3,176	24	20	34	63	83	108	53	49	78	62	44	14	632	

* Stations where neither enteric fever nor malaria nor pyrexia of uncertain origin occurred are not shown in these tables. For annual ratios, see Table III.

EUROPEAN TROOPS, 1912.

TABLE VIII.

TABLE IX.

TABLE X.

*CHOLERA by months, stations, groups,
and armies.*

*DYSENTERY by months, stations, groups,
and armies.*

*DIARRHŒA by months, stations, groups,
and armies.*

[illegible]

* Stations where neither cholera nor dysentery nor diarrhoea occurred are not shown in these tables. For annual ratios, see Table III.

CHOLERA by months, stations,
groups and armies.

DYSENTERY by months, stations,
groups and armies.

DIARRHŒA by months, stations,
groups and armies.

STATIONS,* GROUPS, AND ARMIES.	ADMISSIONS FROM CHOLERA IN EACH MONTH.													ADMISSIONS FROM DYSENTERY IN EACH MONTH.												ADMISSIONS FROM DIARRHŒA IN EACH MONTH.														
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	
A																																								
Jubbulpore	1	...	1	4	...	...	2	...	1	1	...	2	12	...	4	2	3	5	2	1	7	9	3	...	2	38		
Kamptee and Sita- baldi	2	...	1	...	...	...	...	...	...	...	...	3	...	...	6	3	...	...	1	2	...	1	...	...	13		
B																																								
Secunderabad	1	...	...	...	...	1	1	...	5	1	1	1	3	3	8	3	1	3	30	...	1	...	...	...	1	1	10	13	7	6	1	40		
Belgaum	1	...	1	...	...	2	3	...	1	...	...	8	1	...	1	1	4	1	4	1	8	2	2	1	26		
Poona	1	2	...	...	...	...	...	3	4	...	1	1	1	...	...	1	1	...	...	9	1	1	3	...	2	12	11	11	3	6	5	...	55			
Kirkee	3	2	1	...	4	3	8	7	3	3	3	37	...	...	...	...	1	1	3	...	...	...	1	...	6		
Ahmednagar	1	...	...	...	...	1	...	...	...	...	...	1	1	1	2	2	1	1	9	2	1	...	2	3	1	3	8	1	3	1	...	25		
GROUP IX.—DECCAN	1	2	2	...	...	...	...	5	6	6	9	9	2	6	11	16	19	10	5	9	108	4	7	12	9	15	18	24	39	34	22	15	4	203		
Colaba	1	3	...	1	1	2	3	1	2	3	1	3	21	...	...	...	...	2	3	...	1	3	1	2	...	12		
GROUP X.—WEST-ERN COAST																																								
...	1	3	...	1	1	2	3	1	2	3	1	3	21	...	...	...	...	2	3	...	1	3	1	2	...	12		
A																																								
Bellary	1	...	...	1	...	2	1	...	...	...	1	...	...	...	...	...	...	...	2		
Bangalore	7	4	4	4	3	1	1	...	...	...	...	24	4	6	7	4	3	...	...	2	...	3	...	1	...	30		
B																																								
Madras and St. Thomas' Mount	1	...	3	...	...	...	...	...	4	1	5	...	...	...	...	...	...	...	...	...	...	...	6		
GROUP XI.—SOUTH-ERN INDIA																																								
...	7	4	4	4	4	1	4	1	1	...	30	6	11	7	4	4	2	...	3	...	1	...	38	
Ranikhet and Chaubuttia	2		
Chakrata	1	1	1	...	1	...	...	...	...	...	4	...	...	1	4	3	2	2	...	...	...	...	...	12		
Lebong	1	1	...	2	1	1	...	2	...	...	8	...	...	...	2	4	2	1	...	...	1	1	...	11		
Solon	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	...	2		
Dagshai	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	...	3		
Jutogh	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	...	2		
Kalabagh and Bara- gali	3	1	...	1	...	...	...	5		
Camp Gharial	2	...	...	...	1	...	...	3	...	...	...	1	1	...	...	...	1	...	...	...	3		
Camp Barian and Khairagali	1	1	...	...	...	...	...	...	2	...	...	...	...	...	...	5	...	2	...	...	...	7		
Khan Spur and Ghora Dhaka	2	...	...	...	...	...	...	2	...	...	...	...	...	...	1	1	1	...	...	...	3		
Cherat	1	2	2	11	4	1	...	...	21		
Quetta	2	1	...	...	1	...	...	...	...	...	...	...	4	1	...	1	4	4	4	6	2	2	2	...	...	26		
Maymyo	2	...	1	1	...	1	5	3	15	2	3	1	...	24	
GROUP XIIa.—HILL STATIONS	2	1	3	5	6	6	3	1	1	3	...	...	31	1	...	1	9	20	15	22	25	11	3	3	2	121		
Darjeeling	2	...	...	...	...	2	...	...	...	...	1	2	3	1	...	...	...	...	7		
Naini Tal	3	1	...	...	...	...	...	7		
Kasauli	1	2	1	...	1	...	...	...	5	1	1	...	...	...	...	1	...	...	1	...	...	4		
Dalhousie	1	...	...	...	...	1	...	...	...	...	...	1	...	2	1	...	...	...	5		
Mutree and Lower and Upper Topes	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Mount Abu	1	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Pachmari	1	...	...	...	...	1		
Purandhur	1	...	...	...	...	1	...	...	...	...	...	...	...	...	2	1	1	...	4		
Khandalla	1	...	1	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	1	...	...	1		
Wellington	1	...	...	1	...	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	...	1		
GROUP XIIb.—HILL CONVALESCENT DEPÔTS, AND SANITORIA	1	...	1	...	1	1	3	4	4	1	16	1	1	6	3	9	3	...	4	2	1	...	30	
Troops Marching Deolali Depôt	1	...	2	1	1	29	...	5	1	3	1	1	11	11	...	33	
Poonamallee Depôt	4	...	...	...	...							

* Stations where neither cholera nor dysentery nor diarrhœa occurred are not shown in these tables. For annual ratios, see Table III.

EUROPEAN TROOPS, 1912.

TABLE XI.

STATISTICS OF OFFICERS, WOMEN AND CHILDREN.

SICKNESS and MORTALITY among OFFICERS, WOMEN and CHILDREN of the BRITISH ARMY in 1912.

	OFFICERS.			WOMEN.			CHILDREN.		
	Northern Army.	Southern Army.	India.	Northern Army.	Southern Army.	India.	Northern Army.	Southern Army.	India.
STRENGTH	1,148	1,027	2,278	2,205	1,940	4,147	3,564	3,478	7,046
CASES REMAINING FROM 1911	20'0	11'7	3,515'4	7'3	13'4	4,210'1	7'0	7'5	517'2
CONSTANTLY SICK	25'5	20'7	22'2	20'1	22'4	21'2	14'5	15'6	15'1
INVALIDING	14'8	19'5	16'2	10'9	13'9	12'3	1'7	1'2	1'4
ADMISSIONS.									
Influenza	20'1	21'4	19'8	2'7	1'5	2'2	3'4	'6	2'0
Cholera	'9	...	'4	...	1'5	'7	...	'6	'3
Small-pox	1'7	1'9	2'2	5'4	3'1	4'3	3'6	'6	2'1
Measles . . . . .	...	...	...	...	...	...	26'9	11'2	19'2
Whooping cough . . . . .	...	...	...	...	...	...	14'0	15'8	14'9
Enteric Fever	7'0	6'8	6'6	4'1	10'3	7'0	1'7	2'3	2'0
Malaria	53'1	43'8	47'4	17'2	28'4	22'4	31'4	22'4	27'0
Sandfly Fever	65'3	11'7	39'1	6'8	2'1	4'6	3'1	'3	1'7
Pyrexia of uncertain origin	48'8	35'1	40'8	13'2	7'2	10'4	10'1	6'6	8'4
Tubercle of the lungs	'9	1'0	'9	3'2	'5	1'9	...	...	...
Tuberculosis Diseases . . . . .	...	...	...	...	...	...	2'0	'9	1'4
Pneumonia	'9	4'9	3'1	'9	...	'5	...	...	...
Respiratory Diseases	16'6	17'5	16'7	7'3	10'3	8'7	45'5	5'2	49'5
Dysentery	6'1	13'6	9'7	4'1	7'7	5'8	2'4	4'0	3'1
Diarrhœa	16'6	16'6	21'9	13'6	20'6	16'9	30'0	50'9	40'3
Hepatic Abscess	'9	1'0	'9	...	...	...	...	...	...
„ Congestion	20'0	15'6	21'9	...	...	...	...	...	...
Eye Diseases . . . . .	...	...	...	...	...	...	19'4	28'8	24'0
Anæmia and Debility . . . . .	...	...	...	192'7	201'0	196'5	...	...	...
Abortion and other affections . . . . .	...	...	...	30'4	30'9	30'6	...	...	...
Affections connected with and consequent on parturition. . . . .	...	...	...	5'9	4'1	5'1	...	...	...
All other diseases peculiar to women . . . . .	...	...	...	38'5	32'5	35'7	...	...	...
Venereal Diseases	2'6	1'9	2'2	...	...	...	...	...	...
ALL CAUSES	655'1	566'7	597'9	480'3	545'4	510'5	365'6	414'6	389'6
DEATHS.									
Cholera . . . . .	...	...	...	...	1'55	'72	...	'29	'14
Small-pox . . . . .	...	...	...	'45	...	'24	...	'29	'14
Diphtheria . . . . .	...	...	...	...	...	...	1'12	2'30	1'70
Enteric Fever . . . . .	...	'97	'44	'91	1'55	1'21	...	...	...
Malaria . . . . .	...	...	...	...	'52	'24	'84	'58	'71
Pyrexia . . . . .	...	...	...	...	...	...	...	...	...
Heat-stroke . . . . .	...	...	...	...	...	...	...	...	...
Circulatory Diseases	'87	...	'44	...	...	...	...	...	...
Tubercle of the Lungs . . . . .	...	'97	'44	'45	1'03	'72	...	...	...
Tuberculosis Diseases . . . . .	...	...	...	...	...	...	1'40	'58	'99
Convulsions . . . . .	...	...	...	...	...	...	2'81	3'16	2'98
Pneumonia . . . . .	...	...	...	'45	...	'24	...	...	...
Respiratory Diseases . . . . .	...	...	...	...	...	...	3'93	3'45	3'69
Teething . . . . .	...	...	...	...	...	...	'84	'58	'71
Dysentery . . . . .	...	...	...	'45	...	'24	'28	1'15	'71
Diarrhœa . . . . .	...	...	...	...	...	...	4'77	5'46	5'11
Hepatic Abscess . . . . .	...	...	...	...	'52	'24	...	...	...
Anæmia, Debility and Premature birth . . . . .	...	...	...	...	...	...	2'53	4'60	3'55
Abortion and affections connected with and consequent on parturition. . . . .	...	...	...	'45	...	'24	...	...	...
Deaths not reported in Medical returns . . . . .	...	...	'44	...	...	5'06	...	...	...
ALL CAUSES	3'48	4'87	4'39	7'26	11'34	9'16	31'43	35'65	33'49
TOTAL INCLUDING DEATHS IN ENGLAND AND OTHER COUNTRIES. . . . .	...	...	7'02	...	...	...	...	...	...

TABLE XII.

DEATHS OF CHILDREN BY AGES AND CAUSES.

AGE AT DEATH.	Cholera.	Small-pox.	Diphtheria.	Enteric Fever.	Malaria.	Pyrexia of uncertain origin.	Tubercular Diseases.	Convulsions.	Respiratory Diseases.	Teething.	Dysentery.	Diarrhoea.	Anæmia, Debility and Immaturity at birth.	ALL CAUSES.	Average Annual strength.	Death-rate per 1,000 of strength.	Liability. (The previous column expressed in percentages.)
Under 6 months . . . . .	...	...	...	...	2	...	2	9	10	...	...	14	25†	100	702	142'45	46'68
Between 6 and 12 months . . . . .	...	...	1	...	...	...	2	7	5	4	...	15	...	52	714	72'83	23'87
„ 12 and 18 „ . . . . .	...	...	1	...	...	...	2	3	2	1	5	6	...	36	737	48'85	16'01
„ 18 and 24 „ . . . . .	...	...	1	...	1	...	...	1	...	...	...	1	...	9	745	12'08	3'95
„ 2 years and 5 years . . . . .	...	...	5	...	2	...	1	1	6	...	...	...	...	23	1,852	12'42	4'07
„ 5 „ and 10 „ . . . . .	...	1	4	...	...	...	...	...	2	...	...	...	...	14	1,582	8'85	2'90
„ 10 „ and 15 „ . . . . .	...	...	...	...	...	...	...	...	1	...	...	...	...	1	538	1'86	'61
„ 15 „ and upwards	1	...	...	...	...	...	...	...	...	...	...	...	...	1	172	5'81	1'90
TOTAL	1	1	12	...	5	...	7	21	26	5	5	36	25	236	7,046*	33'49	...

† Twenty-two premature birth.
• Includes four not classed on the line of march.

II.—INDIAN TROOPS, 1912.

TABLE C.
STATIONS by ARMIES.

STATIONS.	Height above the sea- level in feet.*	Authority for height.†	STATIONS.	Height above the sea- level in feet.*	Authority for height.†	STATIONS.	Height above the sea- level in feet.*	Authority for height.†
NORTHERN ARMY:—			SOUTHERN ARMY:—			EXTRA INDIA NOT IN THE INDIAN COMMAND.		
Abbottabad	4,166	I. B.	Aden	26	S. G.	Colombo		
Allahabad	298	S. G.	Agar	1,671	"	Singapore		
Agra	554	"	Ahmedabad	170	"	Tientsin—N. China		
Alipore	21	I. B.	Ahmednagar	2,125	"	Hong Kong—S. China		
Almora	5,494	S. G.	Ajmer	1,627	"			
Ambala	902	"	Aurangabad	1,865	M. D.			
Amritsar	756	"	Baghdad . . . . .	...	"		
Attock	1,192	"	Bangalore	3,021	S. G.			
Bakloh	4,585	"	Baroda	115	"			
Baragali	7,800	M.O.	Belgaum	2,473	"			
Bareilly	560	S. G.	Bellary	1,483	"			
Barrackpore	24	"	Bhamo	351	"			
Benares	256	"	Bhuj	341	"			
Buxa	2,457	"	Bolarum	1,890	I. B.			
Campbellpore	1,200	M.O.	Bombay	20	S. G.			
Cawnpore	417	S. G.	Bushire	40	I. B.			
Chakdara	2,500	I. B.	Cannanore	47	S. G.			
Cherat	4,546	S. G.	Charbar . . . . .	...	"		
Chitral	4,980	"	Chaman	5,488	S. G.			
Dargai . . . . .	...	"	Deesa	470	"			
Dehra Dun	2,229	S. G.	Deoli	1,122	"			
Delhi	715	"	Erinpura	876	"			
Dera Ismail Khan	571	"	Fort Sandeman	4,522	I. B.			
Dharmasala	6,111	"	Goon	1,617	S. G.			
Dibrugarh	342	"	Gumbaz	3,050	I. B.			
Dinapore	171	"	Hindu Bagh	5,675	"			
Drazinda	1,600	I. B.	Hyderabad	134	I. B.			
Edwardesabad	1,279	"	Indore	1,806	S. G.			
Fatehgarh	444	"	Jacobabad	181	"			
Ferozepore	645	S. G.	Jaipur	1,582	"			
Fort Abazai . . . . .	...	"	Jask . . . . .	...	"		
Fort Jamrud	1,610	I. B.	Jhansi	860	S. G.			
Fort Lockhart	6,473	"	Jubbulpore	1,305	"			
Fort Shabkader . . . . .	...	"	Kamptee	930	"			
Fort William	17	S. G.	Karachi	28	"			
Fort Zam	1,350	I. B.	Khormaksar	50	I. B.			
Fyzabad	336	S. G.	Kirkee	1,837	S. G.			
Gangtok	5,000	I. B.	Kila Saifulla	5,090	I. B.			
Gyantse	12,900	"	Loralai	4,450	S. G.			
Hangu	3,650	"	Madras	15	"			
Jandola	2,430	"	Mandalay (Fort Dufferin)	249	"			
Jatta	1,000	"	Manzai	3,080	I. B.			
Jhelum	827	S. G.	Maymyo	3,508	S. G.			
Jullundur	900	"	Meiktila	860	"			
Jutogh	6,371	"	Mhow	1,903	"			
Kalabagh	7,936	I. B.	Mir Ali Khel	3,620	I. B.			
Khairagali	7,678	S. G.	Mount Abu	3,960	S. G.			
Kila Drosch	4,250	I. B.	Murgha	5,038	I. B.			
Kohat	1,768	"	Musa Khel	4,600	"			
Kohima	4,500	"	Muscat . . . . .	...	"		
Lahore Cantonment	706	S. G.	Nasirabad	1,461	S. G.			
Lansdowne	6,260	"	Neemuch	1,613	"			
Lucknow	400	"	Nowgong	770	I. B.			
Malakand Fort	3,889	"	Ootacamund	7,216	S. G.			
Manipur	2,619	"	Perim	249	I. B.			
Mardan . . . . .	...	"	Pishin	5,157	S. G.			
Meerut	739	S. G.	Poona	1,909	"			
Multan	402	"	Port Blair	85	"			
Naini Tal	6,400	"	Quetta	5,511	"			
Nowshera	1,100	M. O.	Rajkot	417	"			
Peshawar	1,170	I. B.	Rangoon	14	"			
Rawalpindi	1,707	S. G.	Robat . . . . .	...	"		
Rurki	884	"	Santa Cruz . . . . .	...	"		
Sadiya	440	M. H. I.	Satara	2,183	S. G.			
Shillong	4,987	S. G.	Saugor	1,753	"			
Sialkot	829	"	Secunderabad	1,732	"			
Simla	7,230	"	Sehore	1,617	"			
Thal	2,820	I. B.	Shelabagh	6,380	I. B.			
Takdah	5,300	S. G.	Shiraz . . . . .	...	"		
Tank	826	S. G.	Sibi	489	S. G.			
			St. Thomas' Mount	250	"			
			Trichinopoly	274	"			
			Trivandrum	198	M. D.			

* These are usually the heights above sea-level of the survey-marks or of the mercury-surface in barometer-cisterns in the stations.
† S. G. = Surveyor-General of India; M. H. I. = Dr. Macnamara's "Himalayan India"; M. D. = Meteorological Department; I. B. = Intelligence Branch of the Division of the Chief of the Staff; M. O. = Medical Officers in charge of Station Hospitals in their Sanitary Reports.

TABLE XIII.

RATIOS of ARMIES.

The ratios of admissions and deaths to strength are taken from Table XV.

	RATIO PER 1,000 OF THE AVERAGE STRENGTH.		
	Northern Army.	Southern Army.	Army of India.*
I.—AVERAGE ANNUAL STRENGTH	62,026	51,547	132,232
II.—CONSTANTLY SICK	23'3	19'5	20'1
III.—ADMISSION RATE OF THE YEAR—			
Influenza	3'9	2'6	3'4
Cholera	'3	1'2	'6
Small-pox	'7	'4	'5
Enteric Fever	2'3	1'7	1'8
Malaria	98'1	82'7	88'9
Sandfly Fever	19'5	1'5	10'0
Pyrexia of uncertain origin	50'2	42'0	44'1
Plague	'0	'5	'2
Tubercle of the Lungs	2'6	1'5	2'0
Pneumonia	7'9	5'8	6'6
Respiratory Diseases	24'7	25'2	26'2
Dysentery	13'5	18'9	16'7
Diarrhœa	11'4	17'5	13'8
Hepatic {Abscess	'1	'2	'1
{Congestion and Inflammation	1'3	1'2	1'3
Scurvy	'4	2'3	1'1
Venereal Diseases	13'4	14'9	14'4
ALL CAUSES	633'8	505'8	547'5
IV.—DEATH RATE OF THE YEAR—			
Cholera	'18	'48	'29
Small-pox	'02	'04	'02
Enteric Fever	'58	'48	'47
Malaria	'23	'27	'26
Sandfly Fever . . . . .	...	...	...
Pyrexia of uncertain origin	'16	'08	'11
Plague	'02	'33	'14
Circulatory Diseases	'13	'29	'21
Tubercle of the Lungs	'34	'16	'24
Pneumonia	1'02	'80	'83
Respiratory Diseases	'21	'12	'17
Dysentery	'10	'10	'10
Diarrhœa	'03	'02	'02
Hepatic Abscess	'03	'08	'05
Anæmia and Debility . . . . .	...	'16	'08
ALL CAUSES	4'48	4'81	4'42

* For complete detail of diseases, see Table XXXIII.

TABLE XIV.

RATIOS of GEOGRAPHICAL GROUPS.

The ratios of admissions and deaths to strength are taken from Table XV.

	RATIO PER 1,000 OF THE AVERAGE STRENGTH.												
	I Burma Coast and Bay Islands.	II Burma Inland.	III Assam.	IV Bengal and Orissa.	V Gange- tic Plain and Chutia Nagpur.	VI Upper Sub-Hima- laya.	VII N.-W. Frontier, Indus Valley, and N.-W. Rajpu- tana.	VIII S.-E. Rajpu- tana, Central India, and Gujarat.	IX Dec- can.	X West- ern Coast.	XI South- ern India.	XII Hill Stations.	Army of India.*
I.—AVERAGE ANNUAL STRENGTH .	1,185	2,849	933	2,332	6,441	21,418	18,302	11,394	18,039	1,999	4,683	22,019	132,232
II.—CONSTANTLY SICK . . .	29'5	22'5	23'6	25'3	16'9	25'1	22'7	19'0	19'7	23'5	16'7	21'3	20'1
III.—ADMISSION RATE OF THE YEAR—													
Influenza	'8	4'2	...	'9	'5	7'7	2'7	1'3	1'5	3'5	6'4	2'7	3'4
Cholera . . . . .	...	...	...	'4	2'8	'0	'1	1'3	2'5	'5	'2	...	'6
Small-pox . . . . .	...	'7	...	...	'6	'6	'9	1'0	'4	...	...	'3	'6
Enteric Fever . . . . .	...	...	1'1	1'3	2'0	1'5	2'4	2'3	2'8	...	'2	2'9	1'8
Malaria	146'0	123'6	184'4	176'7	22'5	72'8	134'5	65'4	56'1	126'1	143'3	89'5	88'9
Sandfly Fever . . . . .	...	...	...	...	...	47'5	10'4	2'0	3'0	...	...	'2	9'8
Pyrexia of uncertain origin .	17'7	51'2	43'9	160'4	40'8	55'6	37'3	42'2	42'5	25'0	10'9	45'1	44'1
Plague . . . . .	...	...	...	...	...	'0	...	'2	1'2	'5	'4	...	'4
Tubercle of the Lungs . .	'8	'7	1'1	1'3	1'1	3'5	2'0	1'9	'9	2'0	1'7	2'7	2'0
Pneumonia	3'4	2'5	9'6	9'0	4'0	7'2	7'5	7'9	6'3	10'0	2'6	8'5	6'6
Respiratory Diseases . .	42'2	31'6	28'9	30'4	20'5	23'9	24'5	19'4	23'3	21'5	16'4	31'2	26'2
Dysentery	7'6	5'3	30'0	19'3	10'1	13'2	16'2	23'4	15'4	61'0	8'8	6'6	16'7
Diarrhœa	3'4	26'3	17'1	3'4	8'4	11'1	19'3	8'7	14'2	36'0	8'1	16'4	13'8
Hepatic { Abscess . . . . .	...	...	...	'4	...	'3	'1	'4	'1	...	'2	...	'1
{ Congestion	2'5	...	...	1'3	'8	1'9	'5	1'3	1'7	1'0	'9	1'5	1'3
{ Inflammation . . . . .	...	...	1'1	1'3	'2	'3	'4	'9	2'2	6'5	'4	1'0	1'1
Scurvy . . . . .	...	...	1'1	1'3	'2	'3	'4	'9	2'2	6'5	'4	1'0	1'1
Venereal Diseases . . .	36'3	14'0	20'4	15'9	13'4	17'9	8'5	12'3	19'7	16'0	19'4	9'3	14'4
ALL CAUSES	661'6	632'9	716'0	817'3	446'4	638'2	705'4	478'3	479'8	610'8	486'7	548'3	547'5
IV.—DEATH RATE OF THE YEAR—													
Cholera . . . . .	...	...	...	'43	1'24	'05	'05	'53	1'00	'50	...	...	'29
Small-pox . . . . .	...	...	...	...	...	'05	...	'09	...	'50	...	...	'02
Enteric Fever . . . . .	...	...	...	'43	'47	'33	'75	'44	1'00	...	...	'59	'47
Malaria . . . . .	...	'70	...	...	'16	'09	'16	...	'44	'50	...	'45	'26
Sandfly Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Pyrexia of uncertain origin .	...	...	...	'43	'16	'19	'11	...	'11	...	'21	'14	'11
Plague . . . . .	...	...	...	...	...	'05	...	'18	'67	'50	'43	...	'14
Circulatory Diseases . .	'84	...	...	'43	...	'23	'11	'18	'33	...	'43	'18	'21
Tubercle of the Lungs . .	...	...	...	'43	'16	'51	'05	'09	'05	...	'21	'54	'24
Pneumonia . . . . .	...	'35	1'07	'86	'62	1'03	'48	1'05	'72	2'00	'21	1'54	'83
Respiratory Diseases . .	'84	...	...	...	...	'19	'16	'09	'05	...	'21	'36	'17
Dysentery . . . . .	...	...	...	1'29	...	...	'05	...	'05	1'00	'21	'09	'10
Diarrhœa . . . . .	...	...	...	...	'16	'05	...	'09	...	...	...	...	'02
Hepatic Abscess . . . . .	...	...	...	'43	...	...	'05	'18	'05	...	'21	...	'05
Anæmia and Debility . .	...	...	...	...	...	...	...	'35	'11	1'00	...	...	'08
ALL CAUSES	4'38	1'40	8'57	5'15	4'04	4'34	3'16	4'21	5'99	8'00	3'63	5'63	4'42

* Including Group Extra India and Field Forces.

TABLE XV.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.														2. DEATH RATE.									
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhœa.
Port Blair . .	202 {	...	...	...	...	529'7	...	...	...	...	...	24'8 4'95	...	...	...	...	...	...	...	5'0	678'2 4'95	24'8	5'0	...	...
Rangoon . .	983 {	1'0	...	...	...	67'1	...	21'4	...	1'0 1'02	1'0	4'1	45'8	9'2	4'1	...	3'1	...	7'1	42'7	658'2 3'05	30'5	5'1	18'3	19'3
GROUP I.—BURMA COAST AND BAY ISLANDS. }	1,185 {	8	...	...	...	146'0	...	17'7	...	8 84	8	3'4	42'2 84	7'6	3'4	...	2'5	...	5'9	36'3	661'6 4'38	29'5	5'1	15'2	16'0
Meiktila . .	664 {	7'5	...	...	...	28'6	...	48'2	...	...	1'5	...	31'6	7'5	3'0	...	...	...	4'5	9'0	430'7 1'51	15'1	4'5	4'5	...
Fort Dufferin . .	1,430 {	...	...	1'4	...	353'8 1'40	...	78'3	...	7	7	4'2 70	18'2	7'0	26'6	...	...	...	12'6	21'0	784'6 2'10	25'2	7'7	2'8	10'5
Bhamo . .	755 {	9'3	...	...	...	148'3	...	2'6	...	1'3	...	1'3	57'0	...	46'4	...	...	...	7'9	5'3	523'2	23'8	...	2'6	2'6
GROUP II.—BURMA INLAND }	2,849 {	4'2	...	7	...	223'6 70	...	51'2	...	7	7	2'5 35	31'6	5'3	26'3	...	...	...	9'5	14'0	632'9 1'40	22'5	4'9	3'2	6'0
Manipur . .	548 {	...	...	...	1'8	229'9	...	36'5	...	...	1'8	10'9	32'8	40'1	3'6	...	...	...	20'1	23'7	819'3	25'5	7'3	...	16'4
Sadiya . .	56 {	...	...	...	...	339'3	...	...	...	...	...	17'9 17'86	17'9	71'4	17'9	...	...	17'9	...	17'9	785'7 17'86	17'9	17'9	...	...
Dibrugarh . .	329 {	...	...	...	...	82'1	...	63'2	...	6'1	...	6'1	24'3	6'1	39'5	...	...	...	27'4	15'2	531'9 21'28	21'3	9'1	...	6'1
GROUP III.—ASSAM . }	933 {	...	...	...	1'1	184'4	...	43'9	...	2'1	1'1	9'6 1'07	28'9	30'0	17'1	...	...	1'1	21'4	20'4	716'0 8'57	23'6	8'6	...	11'8
Fort William . .	537 {	...	1'9 1'86	...	...	65'2	...	98'7	...	186	...	7'4	29'8	18'6	5'9	...	3'7	...	14'9	41'0	672'2 3'72	27'9	14'9	18'6	7'4
Alipore . .	927 {	...	...	...	2'2 1'08	370'0	...	247'0 1'08	...	...	2'2 1'08	17'3 2'16	30'2	35'6 2'16	1'1	...	1'1	1'1	20'5	4'3	1,082'0 8'63	28'0	...	4'3	...
Barrackpore . .	729 {	...	...	...	1'4	37'0	...	126'2	...	...	...	1'4	35'7	2'7 1'37	5'5	1'4 1'37	...	2'7	17'8	12'3	694'1 2'74	21'9	...	8'2	4'1
Buxa . .	139 {	14'4	...	...	...	50'4	...	...	...	...	7'2	...	7'2	...	...	...	...	...	14'4	14'4	259'0	14'4	14'4	...	...
GROUP IV.—BENGAL AND ORISSA }	2,332 {	9	4	...	1'3	176'7	...	160'4	...	...	1'3	9'0	30'4	19'3	3'4	4	1'3	1'3	18'0	15'9	817'3 5'15	25'3	4'3	8'6	3'0

INDIAN TROOPS, 1912.

TABLE XV—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE.															
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhœa.		
B																											
Dinapore . . .	697 {	...	...	...	2'9	53'1	...	50'2	...	...	1'4	...	20'1	1'4	20'1	...	...	...	4'3	10'0	482'1	18'7	2'9	4'3	2'9
Benares . . .	519 {	5'8	...	...	1'93	28'9	...	1'9	...	1'9	...	5'8	5'8	7'7	7'7	...	...	...	1'9	23'1	398'8	17'3	5'8	5'8	11'6
Allahabad . . .	970 {	...	...	1'0	1'0	20'6	...	32'0	...	1'0	1'0	4'1	14'4	21'6	5'6	...	...	...	24'7	9'3	396'9	12'4	2'1	...	7'2
Fyzabad . . .	1,194 {	...	...	8	6'7	34'3	...	10'9	...	...	1'7	7'5	22'6	10'1	7'5	...	2'5	...	5'9	15'9	438'0	17'6	2'5	3'4	10'1
Lucknow . . .	1,838 {	...	...	...	5	5	...	93'1	...	...	...	2'7	31'6	9'8	7'6	...	1'1	5	14'1	13'2	554'4	18'5	3'8	5'4	3'8
Cawnpore . . .	927 {	...	19'4	...	1'1	15'1	...	12'9	...	...	3'2	2'2	17'3	9'7	5'4	...	...	...	4'3	12'9	351'7	16'2	2'2	5'4	5'4
Fatehgarh . . .	296 {	...	...	6'8	...	57'4	...	...	...	...	3'38	10'1	...	...	10'1	...	...	...	13'5	10'1	266'9	13'5	3'4	...	6'8
GROUP V.—GANGETIC AND PLAIN CHUTIA NAGPUR.	6,441 {	5	2'8	6	2'0	22'5	...	40'8	...	3	1'1	4'0	20'5	10'1	8'4	...	8	2	10'7	13'4	446'4	16'9	3'1	3'9	6'4		
A																											
Bar eilly . . .	1,119 {	...	...	...	1'8	6'3	53'6	7'1	...	89	3'6	7'1	31'3	9	15'2	...	5'4	...	13'4	15'2	498'7	23'2	4'5	1'8	8'9
Rurki . . .	648 {	...	...	...	...	67'9	95'7	...	...	...	1'5	3'1	20'1	...	1'5	...	9'3	...	17'0	17'0	356'5	12'3	1'5	13'9	1'5
Dehra Dun . . .	2,921 {	9'2	...	...	3'8	98'3	22'9	7	...	2'1	6'2	12'3	39'0	5'1	11'6	1'7	2'7	...	7'2	50'7	584'0	43'5	10'6	27'0	13'0
Meerut . . .	1,692 {	...	6	...	...	24'8	305'6	...	...	...	6	3'5	10'0	7'1	8'3	...	1'2	...	11'2	11'8	671'4	20'7	2'4	5'3	4'1
Delhi . . .	1,143 {	9	...	9	1'7	367'5	28'9	2'6	...	...	4'4	7'9	8'7	5'2	21'0	...	2'6	9	14'9	21'0	727'9	19'2	6'1	5'2	9'6
Ambala . . .	1,597 {	6	...	...	1'3	89'5	4'4	42'0	...	...	6	3'8	24'4	16'3	8'8	...	1'9	...	8'8	16'9	539'1	17'5	3'6	5'0	6'3
B																											
Jullundur . . .	1,411 {	...	...	1'4	7	15'6	192'1	119'2	...	...	5'7	4'3	30'5	17'7	10'6	...	2'8	1'4	14'9	12'0	834'9	30'5	3'5	3'5	5'0
Ferozepore . . .	1,462 {	85'5	...	1'4	2'7	73'2	...	42'4	...	2'7	4'8	8'2	22'6	15'0	9'6	...	7	1'4	19'2	5'5	805'1	24'6	2'1	2'1	1'4		
Lahore Cantonment	1,821 {	...	...	5	2'7	128'0	...	135'6	...	1'1	4'4	7'7	23'1	30'8	18'1	5	1'6	5	17'0	8'2	968'1	34'0	1'6	1'1	5'5
Amritsar . . .	95 {	...	...	...	...	21'1	...	21'1	...	...	10'5	21'1	10'5	10'5	21'1	...	...	...	21'1	21'1	410'5	10'5	...	...	21'1
Sialkot . . .	1,676 {	1'2	...	6	2'4	36'4	6	11'9	6	1'8	4'8	6'6	25'1	8'4	6'0	...	6	...	4'2	11'3	496'4	20'9	1'2	4'2	6'0		
Jhelum . . .	3,089 {	2'9	...	3	...	52'8	...	80'3	...	1'3	2'3	6'2	19'1	21'7	7'1	...	6	...	21'4	9'4	661'4	22'0	2'3	2'3	4'9		
Rawalpindi . . .	2,589 {	...	...	1'9	8	8'5	...	140'2	...	4	1'9	6'6	13'5	14'3	10'8	...	4	4	9'3	17'4	465'0	16'2	3'1	9'7	4'6
Campbellpore . . .	155 {	...	...	6'45	...	38'7	...	6'5	...	...	...	38'7	187'1	6'5	6'45	...	...	...	...	6'5	696'8	25'8	6'5	...	...
GROUP VI.—UPPER SUB-HIMALAYA.	21,418 {	7'7	0	6	1'5	72'8	47'5	55'6	0	9	3'5	7'2	23'9	13'2	11'1	3	1'9	3	12'9	17'9	638'2	25'1	4'0	7'6	6'3		
A																											
Mardan . . .	865 {	3'5	1'2	1'2	...	124'9	5'8	53'2	...	...	3'5	10'4	22'0	1'2	13'9	...	...	...	3'5	4'6	617'3	20'8	...	1'2	3'5
Nowshera . . .	3,520 {	...	...	2'0	9	40'9	8'0	12'2	...	...	2'8	6'8	18'8	1'7	15'6	...	6	3	11'1	4'5	623'9	20	1'7	9	2'0
Peshawar . . .	1,870 {	7	...	3	1'0	87'5	23'7	26'5	...	...	1'4	4'9	44'9	6'6	26'1	3	3	3	13'6	14'3	813'9	25'4	4'9	3'1	6'3

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.													2. DEATH RATE.											
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhoea.	
Fort Jamrud .	99 {	...	...	...	10'1	90'9	...	30'3	...	...	...	...	10'1	10'1	40'4	...	...	...	10'1	...	1,023'2	20'2	...	...	...
Kohat .	2,841 {	4	...	1'8	6'0	203'4	1'8	6'0	...	7	2'5	6'7	20'1	17'6	12'3	...	1'1	1'1	9'5	12'0	752'6	22'2	2'8	3'9	5'3	
Thal .	147 {	...	...	...	...	272'1	...	13'6	...	...	...	20'4	20'4	27'2	40'8	...	...	...	34'0	6'8	972'8	20'4	6'8	...	...
Edwardesabad .	2,453 {	...	...	...	1'2	102'1	31'8	32'2	...	4	2'0	13'5	18'0	29'4	14'7	4	4	...	8'1	3'3	495'9	18'0	...	8	2'4
Dera Ismail Khan	1,880 {	11'7	...	...	1'1	403'7	...	54'3	...	1'1	5	8'5	25'5	45'2	11'2	...	...	1'1	19'7	8'0	1,064'9	40'4	1'6	1'1	5'3
Jatta .	56 {	...	...	...	...	...	...	53'6	...	...	...	35'7	35'7	71'4	71'4	...	...	...	17'9	...	571'4	17'9	...	...	...
Drazinda .	60 {	33'3	...	...	...	50'0	...	83'3	...	...	...	33'3	16'7	33'3	...	...	16'7	...	33'3	16'7	583'3	16'7	...	...	16'7
Fort Zam .	4 {	...	...	...	...	250'0	...	...	...	...	...	...	250'0	250'0	...	...	...	...	...	...	1,500'0	250'0	...	...	...
Multan .	1,236 {	...	...	1'6	5'7	55'0	...	127'8	...	8	8	4'0	20'2	11'3	8'9	...	...	8	8'1	12'1	564'7	17'0	4'9	8	6'5
Tank .	424 {	2'4	...	...	11'8	108'5	...	200'5	...	...	...	11'8	4'7	44'8	23'6	...	...	...	21'2	4'7	738'2	21'2	2'4	...	2'4
Fort Abazai .	136 {	...	...	...	14'7	345'6	...	102'9	...	...	...	...	7'4	14'7	22'1	...	7'4	...	22'1	...	897'1	22'1	...	...	...
Fort Shabkadar .	137 {	...	...	...	7'3	240'9	36'5	...	...	...	...	14'6	...	7'3	43'8	...	...	...	...	...	934'3	14'6	...	...	...
B.																										
Jandola .	140 {	...	...	...	...	357'1	...	92'9	...	...	...	...	42'9	85'7	42'9	...	...	...	42'9	...	1,371'4	28'6	...	...	...
Sibi .	77 {	...	...	...	...	64'9	...	181'8	...	...	...	...	39'0	...	103'9	...	...	...	26'0	...	831'2	13'0	...	...	...
C.																										
Jacobabad .	385 {	...	...	...	...	36'4	...	28'6	...	2'60	2'6	...	7'8	2'6	15'6	...	...	...	...	10'4	322'1	7'8	2'6	2'6	5'2
Hyderabad (Sind) .	684 {	...	...	1'5	...	58'5	...	...	...	1'46	5'8	2'9	29'2	1'5	48'2	...	...	...	7'3	19'0	432'7	16'1	7'3	2'9	8'8
Karachi .	283 {	63'6	...	...	...	49'5	7'1	42'4	...	...	3'5	3'5	63'6	7'1	77'7	...	...	...	42'4	7'1	819'8	28'3	...	...	7'1
GROUP VII.—N.-W. FRONTIER, INDUS VALLEY, AND NORTH-WESTERN RAJ-PUTANA.	18,302 {	2'7	1'05	9	2'4	134'5	10'4	37'3	...	3	2'0	7'5	24'5	16'2	19'3	1	5	4	12'1	8'5	705'4	22'7	2'5	1'7	4'3	

INDIAN TROOPS, 1912.

TABLE XV—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.													2. DEATH RATE.										
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhœa.
A																									
Rajkot . . .	125 {	...	...	...	...	64'0	...	328'0	...	...	...	40'0	...	88'0	16'0	...	...	...	32'0	24'0	856'0	24'0	8'0	16'0	...
Deesa . . .	714 {	...	...	1'4 1'40	...	19'6	29'4	183'5	...	...	1'4	18'2 1'40	12'6	21'0	2'8	...	...	...	2'8	4'2	438'4 2'80	16'8	...	1'4	2'8
Ahmedabad . .	356 {	...	...	...	...	22'5	...	50'6	...	2'8	...	11'2	70'2	56'2	5'6	...	...	2'8	11'2	11'2	525'3	22'5	5'6	...	5'6
Baroda . . .	665 {	...	16'5 6'02	...	...	233'1	...	342'9	...	...	1'5	6'0	13'5	88'7	9'0	3'0	1'5	3'0	7'5 1'50	12'0	933'8 12'03	24'1	1'5	...	10'5
B																									
Erinpura . . .	601 {	1'7	...	...	8'3 1'66	41'6	...	1'7	...	...	1'7	13'3 3'33	13'3	11'6	1'7	...	...	...	8'3 1'66	5'0	307'8 8'32	10'0	3'3	...	1'7
Neemuch . . .	349 {	...	...	5'7	...	40'1	...	...	...	...	5'7	11'5 5'73	11'5	11'5	5'7	...	...	11'5	...	8'6	363'9 8'60	17'2	2'9	...	5'7
Deoli . . .	566 {	...	...	...	...	42'4	...	3'5	...	3'5 1'77	...	7'1	19'4 1'77	17'7	24'7	...	...	...	...	15'9	413'4 3'53	14'1	7'1	...	8'8
Nasirabad . .	796 {	...	...	...	...	8'8	...	17'6	...	1'3 1'26	...	5'0	12'6	13'8	1'3	1'3 1'26	1'3	...	8'8	5'0	341'7 2'51	17'6	...	3'8	1'3
Ajmer . . .	606 {	3'3	...	...	1'7	11'6	...	3'3	...	...	1'7	11'6 1'65	11'6	...	9'9 1'65	...	...	...	5'0	1'7	209'6 3'30	8'3	...	...	1'7
Jaipur . . .	39 {	...	...	...	...	25'6	...	...	...	...	...	...	25'6	25'6	...	...	...	...	...	...	230'8	25'6	...	...	...
Agra . . .	706 {	2'8	...	5'7	1'4 1'42	92'1	...	...	...	...	2'8	7'1	42'5	8'5	14'2	...	...	...	8'5	38'2	553'8 1'42	22'7	18'4	14'2	5'7

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE.													
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhœa.
Jhansi . . .	2,465 {	2'4 ...	1'6 81	1'2 ...	5'3 41	75'5 ...	...	8'1 ...	...	...	3'7 41	3'7 41	11'4 ...	11'8 ...	3'2 ...	...	2'8 ...	4 ...	17'8 ...	22'3 41	483'2 4'06	22'3	8'5 41	4'5 ...	9'3 ...
Nowgong . . .	753 {	1'3 ...	...	...	...	61'1 ...	2'7 ...	5'3 ...	...	...	2'7 ...	9'3 2'66	30'5 ...	27'9 ...	6'6 ...	...	2'7 ...	...	10'6 ...	2'7 ...	610'9 3'98	19'9	1'3 ...	1'3...	...
Goona . . .	394 {	2'5 ...	...	...	5'1 2'54	12'7 ...	...	5'1 ...	...	2'5 ...	...	2'5 ...	12'7 ...	2'5 ...	2'5 ...	...	...	...	25'4 ...	5'1 ...	322'3 2'54	17'8	2'5 ...	...	2'5 ...
Agar . . .	98 {	...	...	...	...	51'0 ...	...	...	...	...	...	10'2 ...	...	10'2 ...	...	...	...	...	...	...	306'1 ...	10'2	...	...	...
Sehore . . .	664 {	3'0 ...	...	...	...	54'2 ...	...	4'5 ...	...	1'5 ...	4'5 ...	3'0 1'51	33'1 ...	1'5 ...	1'5 ...	...	3'0 ...	...	13'6 ...	4'5 ...	435'2 1'51	19'6	1'5 ...	...	3'0 ...
Indore . . .	18 {	...	...	...	...	166'7 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	166'7 ...	55'6	...	...	...
Mhow . . .	1,479 {	...	...	7 ...	2'7 68	92'0 ...	...	10'1 ...	1'4 1'35	1'4 ...	...	8'1 1'35	19'6 ...	47'3 ...	25'7 ...	7 68	1'4 ...	1'4 ...	20'3 1'35	8'8 ...	525'4 5'41	20'3	3'4 ...	2'7 ...	2'7 ...
GROUP VIII.— SOUTH-EASTERN RAJPUTANA, CENTRAL INDIA, AND GUJARAT .	11,394 {	1'3 ...	1'3 53	1'0 09	2'3 44	65'4 ...	2'0 ...	42'2 ...	2 18	7 18	1'9 09	7'9 1'05	19'4 09	23'4 ...	8'7 09	4 18	1'3 ...	9 ...	12'0 35	12'3 09	478'3 4'21	19'0	4'7 09	2'8 ...	4'8 ...
A																									
Saugor . . .	1,097 {	...	...	9 ...	9 ...	85'7 ...	...	89'3 ...	...	2'7 ...	...	8'2 91	23'7 ...	16'4 ...	7'3 ...	...	9 ...	9 ...	11'9 ...	10'9 ...	612'6 3'65	18'2	3'6 ...	2'7 ...	4'6 ...
Jubbulpore . . .	2,082 {	...	...	1'0 ...	1'4 48	58'1 1'44	...	5 2'88	4'3 ...	3'4 ...	1'0 ...	4'3 96	17'3 ...	3'8 ...	14'9 ...	...	1'0 ...	...	5'8 ...	12'0 ...	492'8 6'72	19'7	4'8 ...	2'9 ...	4'3 ...
Kamptee . . .	541 {	...	1'8 ...	...	...	159'0 1'85	...	18'5 ...	1'8 ...	...	3'7 ...	12'9 1'85	27'7 ...	14'8 ...	3'7 ...	...	3'7 ...	...	5'5 ...	11'1 ...	576'7 5'55	22'2	1'8 ...	1'8 ...	7'4 ...
B																									
Aurangabad . . .	1,443 {	...	2'1 69	...	9'0 3'47	98'4 ...	...	33'3 ...	...	2'8 1'39	...	6'2 69	11'8 ...	27'7 ...	22'9 ...	...	1'4 69	6'9 ...	4'9 ...	15'9 ...	503'8 8'32	20'8	4'2 ...	3'5 ...	8'3 ...
Ahmednagar . . .	1,249 {	...	2'4 80	...	...	13'6 ...	...	10'4 ...	...	8 ...	3'2 ...	12'0 2'40	24'0 ...	7'2 ...	8'0 ...	...	...	8 ...	4'8 ...	20'0 ...	305'8 4'00	12'8	1'6 ...	9'6 ...	8'8 ...
Bolarum . . .	1,822 {	1'1 ...	2'7 55	...	2'7 1'10	35'7 ...	...	9'9 55	...	...	...	1'1 ...	12'6 ...	4'4 ...	2'7 ...	...	...	...	9'3 ...	9'9 ...	234'4 3'84	10'4	2'2 ...	3'3 ...	4'4 ...
Secunderabad . . .	3,559 {	5'3 ...	7'9 2'81	...	4'8 1'40	47'2 ...	...	40'5 28	8 ...	2'8 28	6 ...	2'5 56	28'1 28	14'9 28	11'2 ...	...	2'2 ...	2'0 ...	6'2 ...	17'7 ...	543'7 7'31	10'8	5'3 ...	3'7 ...	8'7 ...
Belgaum . . .	2,123 {	...	...	1'4 ...	9 47	52'8 ...	...	22'6 ...	...	5 47	5 ...	12'7 47	31'1 ...	8'9 ...	8'9 ...	...	...	8'5 ...	5'7 ...	27'3 ...	375'4 3'29	18'3	3'8 ...	4'2 ...	19'3 ...
Satara . . .	114 {	...	26'3 26'31	...	8'8 8'77	70'2 ...	...	8'8 ...	...	...	...	8'8 ...	35'1 ...	8'8 ...	52'6 ...	...	8'8 ...	...	17'5 ...	43'8 ...	447'4 35'08	17'5	26'3 ...	...	17'5 ...

TABLE XV—continued.

RATIOS of STATIONS, GROUPS and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.												2. DEATH RATE.											
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhoea.
Poona . . .	2,414 {	2'5	'8	'4	2'9	37'3	22'0	96'5	2'9	2'9	1'7	6'2	25'7	38'1	20'7	'4	3'3	'4	17'8	41'0	59'4	27'8	14'9	11'6	14'5
Kirkee . . .	1,595 {	...	...	...	'6	68'3	'6	95'3	'6	'6	1'3	6'9	25'7	13'8	33'2	'6	3'8	'6	8'2	13'2	558'6	21'9	3'1	3'8	6'3
		...	...	...	...	1'88	...	...	'63	'63	...	1'25	...	...	...	...	...	...	1'25	...	6'90	...	...	...	...
GROUP IX.— DECCAN.	18,039 {	1'5	2'5	'4	2'8	56'1	3'0	42'5	1'2	1'9	'9	6'3	23'3	15'4	14'2	2'1	1'7	2'2	8'3	19'7	479'8	19'7	5'4	4'9	9'3
		...	1'06	...	1'00	'44	...	'11	'67	'33	'05	'72	'05	'05	...	'05	...	...	'11	'05	5'99	...	...	...	...
Bombay . . .	849 {	1'2	1'2	...	...	240'3	...	40'0	...	1'2	...	17'7	22'4	69'5	80'1	...	1'2	9'4	61'2	13'0	829'2	30'6	5'9	7'1	...
		...	1'18	1'18	...	1'18	...	...	...	...	...	3'53	...	2'36	...	...	...	...	2'36	...	15'31	...	...	...	...
Santa Cruz . . .	699 {	8'3	...	...	...	62'9	...	20'0	1'4	1'4	4'3	7'2	25'8	85'8	2'9	...	1'4	7'2	15'7	12'9	593'7	24'3	...	7'2	5'7
		...	...	...	...	...	...	...	1'43	...	...	1'43	...	...	...	...	...	...	...	...	2'86	...	...	...	...
Cannanore . . .	376 {	...	...	...	...	8'0	...	5'3	...	...	2'7	...	10'6	2'7	2'7	...	...	...	2'7	31'9	215'4	8'0	5'3	16'0	10'6
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2'67	...	...	...	...
Trivandrum . . .	75 {	...	...	...	...	13'3	...	...	...	...	...	...	26'7	26'7	13'3	...	...	...	...	...	280'0	13'3	...	...	...
	
GROUP X.— WESTERN COAST.	1,999 {	3'5	'5	'50	...	126'1	...	25'0	'5	1'0	2'0	10'0	21'5	61'0	36'0	...	1'0	6'5	32'0	16'0	610'8	23'5	3'5	8'5	4'0
		...	'50	'50	...	'50	...	...	'50	...	...	2'00	...	1'00	...	...	...	...	1'00	...	8'00	...	...	...	...
A																									
Bellary . . .	7 {	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bangalore . . .	3,600 {	'3	...	...	'3	177'8	...	10'0	'6	1'1	1'9	2'8	16'1	9'4	8'1	...	'8	'6	3'9	21'1	516'7	17'5	7'5	4'7	8'9
		...	...	...	...	...	...	'28	'56	'28	'28	'28	'28	...	...	...	...	...	...	...	3'89	...	...	...	...
B																									
Trichinopoly . . .	483 {	62'1	2'1	...	...	22'8	...	6'2	...	2'1	2'1	4'1	14'5	14'5	4'1	...	2'1	...	10'4	12'4	418'2	14'5	2'1	2'1	8'3
		...	...	...	...	...	...	...	...	...	...	...	...	2'07	...	...	...	...	...	...	2'07	...	...	...	...
St. Thomas' Mount. }	475 {	...	...	...	...	14'7	...	25'3	...	...	...	...	21'1	...	6'3	2'1	...	...	10'5	8'4	334'7	12'6	...	2'1	6'3
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	2'11	...	...	...	...	2'11	...	...	...	...
Madras . . .	118 {	...	...	...	...	110'2	...	...	...	8'47	...	...	16'9	...	33'9	...	...	...	8'5	42'4	491'5	16'9	16'9	...	25'4
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8'47	...	...	...	...
GROUP XI.— SOUTHERN INDIA.	4,683 {	6'4	'2	...	'2	143'3	...	10'9	'4	1'1	1'7	2'6	16'4	8'8	8'1	'2	'9	'4	5'3	19'4	486'7	16'7	6'4	4'1	9'0
		...	...	...	...	...	...	'21	'43	'43	'21	'21	'21	'21	...	'21	...	...	...	...	3'63	...	...	...	...
Maymyo . . .	869 {	15'0	...	1'2	...	146'1	...	25'3	...	1'2	...	5'8	42'6	4'6	41'4	...	...	1'2	10'4	19'6	682'4	23'0	...	13'8	5'8
		...	...	...	...	...	...	...	...	...	...	1'15	...	...	...	...	...	...	...	...	1'15	...	...	...	...
Kohima . . .	140 {	...	...	...	...	221'4	...	100'0	...	...	...	...	85'7	42'9	...	...	14'3	...	78'6	7'1	935'7	28'6	7'1	...	...
		...	...	...	...	...	...	7'14	...	...	...	...	...	...	...	...	...	...	...	...	7'14	...	...	...	...
Shillong . . .	546 {	1'8	...	...	9'2	276'6	...	45'8	...	...	3'7	7'3	23'8	38'5	7'3	...	11'0	...	11'0	38'5	1,100'7	38'5	5'5	7'3	25'6
		...	...	...	...	...	...	...	...	1'83	...	1'83	...	...	...	...	1'83	...	...	...	5'49	...	...	...	...
Gangtok . . .	129 {	...	...	...	...	...	...	69'8	...	...	...	...	46'5	...	15'5	...	...	...	23'3	...	271'3	7'8	...	...	...
	
Takdah . . .	620 {	...	...	...	...	48'4	...	...	...	3'2	4'8	14'5	51'6	...	16'1	...	...	...	12'9	12'9	609'7	25'8	3'2	3'2	6'5
		...	...	...	...	...	...	...	...	1'61	...	...	...	...	...	...	...	...	...	...	1'61	...	...	...	...
Gyantse . . .	48 {	...	...	...	...	...	...	...	...	...	...	...	62'5	...	...	...	...	...	...	...	62'5	20'8	...	...	...
	
Almora . . .	489 {	...	...	...	10'2	51'1	...	2'0	...	...	2'0	10'2	30'7	...	4'1	...	6'1	...	...	22'5	431'5	24'5	6'1	4'1	12'3
		...	...	...	2'04	...	...	...	...	...	...	4'09	...	...	...	...	...	...	...	...	8'18	...	...	...	...

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.														2. DEATH RATE.									
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhœa.
Naini Tal .	81 {	...	...	...	86'4	...	...	...	...	...	12'3	...	37'0	...	12'3	...	49'4	...	12'3	...	345'7 24'69	24'7	...	...	...
Lansdowne .	2,302 {	2'2	...	...	...	112'9	...	1'3	...	9	4'8 87	10'4 87	21'7 1'30	1'3	8'3	...	1'3 87	9	5'2	5'2	445'3 4'34	20'0	2'2	1'3	1'7
Simla .	120 {	...	...	8'3	...	75'0	...	16'5	...	...	...	33'3	41'7	8'3	...	...	...	...	8'3	66'7	475'0	16'7	8'3	16'7	41'7
Jutogh .	182 {	...	...	...	...	104'4	...	33'0	...	5'5	...	...	5'5	5'5	11'0	...	...	...	11'0	11'0	582'4 5'49	27'5	...	5'5	5'5
Dharmasala .	1,397 {	...	...	...	2'1	9'3 72	...	12'9	...	...	2'1	12'2 2'15	16'5	6'4 72	1'4	...	2'1	7	19'3	6'4	233'4 4'29	12'2	2'9	1'4	2'1
Bakloh .	1,288 {	10'1	...	1'6	1'6 78	69'9 1'55	8	2'3	...	...	1'6 78	4'7 3'11	15'5 2'33	1'6	4'7	...	...	...	3'1	3'1	270'2 10'87	12'4	8	8	1'6
Khairagali .	66 {	...	...	...	15'2	30'3	...	136'4	...	...	15'2	...	45'5	30'3	...	...	...	...	15'2	...	697'0 15'15	15'2	...	...	...
Baragali .	62 {	...	...	...	16'1	48'4	...	32'3	...	...	...	16'1	...	6'4'5	...	...	...	...	...	...	371'0	16'1	...	...	...
Kalabagh .	63 {	...	...	...	31'7 15'87	...	...	1'	...	...	...	47'6	15'9	31'7	...	...	...	...	31'7	...	381'0 15'87	15'9	...	...	...
Chitral .	132 {	...	...	...	7'6 7'58	30'3	...	1,484'8	...	...	7'6	...	22'7	...	22'7	...	...	...	15'2	...	1,954'5 7'58	37'9	...	...	...
Kila Drosh .	507 {	...	...	...	2'0	108'5	...	420'1	...	2'0	11'8 5'92	2'0	25'6	...	17'8	...	...	2'0	9'9	7'9	1,179'5 9'86	39'4	5'9	2'0	...
Malakand .	715 {	...	...	...	...	86'7 2'80	...	15'4	...	1'4	...	21'0 6'99	53'1	4'2	14'0	...	...	1'4	33'6	...	711'9 12'59	25'2	...	...	...
Dargai .	388 {	...	...	...	...	46'4	...	10'3	...	...	...	7'7	12'9	2'6	7'7	...	...	...	38'7	7'7	698'5	23'2	2'6	...	5'2
Chakdara .	376 {	...	...	...	5'3 2'66	154'3	...	26'6	...	...	2'7	16'0 2'66	10'6	13'3	8'0	...	...	2'7	13'3	5'3	659'6 5'32	23'9	...	2'7	2'7
Abbottabad .	3,031 {	5'9	...	...	5'3 66	144'2 99	1'3	18'5 33	...	...	3'3 33	13'5 1'98	30'4 33	16'8 33	6'3	...	1'3	3	12'5	17'2	687'2 6'93	30'4	2'3	10'2	4'6
Cherat .	50 {	...	...	...	...	60'0	...	...	...	...	...	...	20'0	60'0	20'0	...	20'0	...	...	...	780'0	20'0	...	...	...
Fort Lockhart .	378 {	...	...	...	5'3	193'2	...	21'2	...	...	...	...	21'2	...	...	...	...	...	5'3	5'3	425'9 5'29	18'5	...	5'3	...
Hangu .	213 {	...	...	4'7	4'7 4'69	159'6	...	18'8	...	...	...	14'1 4'69	28'2	9'4	...	...	...	...	9'4	9'4	446'0 9'39	23'5	4'7	...	4'7
Mir Ali Khel .	87 {	...	...	...	...	23'0	...	46'0	...	...	...	...	34'5	...	149'4	...	34'5	...	23'0	...	494'3	11'5	...	...	...
Fort Sandeman .	509 {	...	...	...	...	90'4	...	5'9	...	...	2'0	7'9 3'93	11'8	2'0	68'8	...	2'0	2'0	47'2	7'9	489'2 13'75	13'8	2'0	2'0	3'9
Hindu Bagh .	30 {	...	...	...	...	266'7	...	...	...	...	...	...	66'7	33'3	66'7	...	...	...	...	33'3	666'7	33'3	...	33'3	...
Musa Khel .	85 {	...	...	...	...	505'9 11'76	...	...	...	...	...	...	...	35'3	35'3	...	...	11'8	11'8	23'5	811'8 11'76	23'5	...	...	23'5
Kila Saifulla .	30 {	...	...	...	...	100'0	...	...	...	...	...	...	65'7	33'3	33'3	...	...	...	33'3	...	400'0	33'3	...	...	...
Murgha .	29 {	...	...	...	...	379'3	...	...	...	...	...	...	...	34'5	103'4	...	...	...	34'5	...	827'6 34'48	34'5	...	...	...

TABLE XV—concluded.

RATIOS of STATIONS, GROUPS, and ARMIES.

STATIONS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.															2. DEATH RATE.										
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhœa.		
Loralai . . .	895 {	...	...	...	3'4	221'2	...	169'8	...	...	2'2	10'1	15'6	...	13'4	...	...	1'1	29'1	6'7	782'1 3'35	25'7	2'2	...	4'5
Gumbaz . . .	27 {	...	...	...	...	222'2	...	...	...	...	...	...	...	74'1	...	...	...	...	...	...	444'4	37'0	...	...	...
Quetta . . .	4,819 {	2'1	...	4	1'7 21	35'7 21	...	37'8	...	2'5 42	2'5 1'04	4'8 83	50'2 21	2'9	29'5	...	6	8	15'6	5'0	501'6 3'94	17'6	8	6	3'5		
Pishin . . .	133 {	...	...	...	...	15'0	...	7'5	...	...	7'5	7'5 7'52	50'2	7'5	22'6	...	...	7'5	7'5	30'1	315'8 7'52	7'5	15'0	...	15'0
Shelabagh . . .	83 {	...	...	...	...	...	...	...	...	...	...	...	48'2	...	24'1	...	...	...	120'5	...	301'2	12'0	...	...	...
Robat . . .	364 {	...	...	...	...	...	...	24'7	...	...	...	...	13'7	2'7	35'7	...	2'7	8'2	...	2'7	241'8	5'5	2'7	...	...
Chaman . . .	599 {	...	...	...	5'0 3'34	16'7	...	38'4	...	...	3'3	3'3	11'7	...	...	...	...	3'3	1'7	5'0	250'4 6'68	15'0	1'7	...	3'3
Mount Abu . . .	7 {	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	428'6	142'9	...	...	...
Ootacamund . . .	94 {	...	...	...	...	...	...	...	...	...	...	10'6 10'64	...	...	...	...	...	...	...	10'6	148'9 10'64	10'6	...	...	10'6
Manzai . . .	36 {	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55'6	27'8	...	...	...
GROUP XII.— HILL STA- TIONS.	22,019 {	2'7	...	3	2'9 59	89'5 45	2	45'1 14	...	9	2'7 54	8'5 1'54	31'2 36	6'6 09	16'4	...	1'5 14	1'0	14'6	9'3	548'3 5'63	21'3	1'9	3'1	4'2		
Marching India . . .	12,280 {	3'8	2 16	2	7 08	61'8 08	2'0	36'1 08	...	4	8	5'8 24	13'1	19'0	8'8	...	1'1	5	6'2	6'2	320'6 1'55	5'5	1'7	2'3	2'2		
Abor Expedition . . .	588 {	...	...	...	...	68'0	...	18'7	...	13'6	...	5'1	49'3	86'7 1'70	...	...	...	...	15'3	17'0	552'7 3'40	13'6	6'8	1'7	8'5
EXTRA INDIA.																											
(a) In the Indian Command.																											
Charbar . . .	62 {	...	...	...	...	48'4	...	32'3	...	...	...	...	16'1	306'5	80'6	...	...	16'1	...	...	709'7 16'13	16'1	...	...	...
Jask . . .	200 {	...	...	...	...	40'0	...	50'0	...	...	...	...	20'0	640'0	65'0	...	...	90'0	10'0	...	1,130'0	35'0	...	...	...
Muscat . . .	22 {	...	...	...	...	227'3	...	...	...	...	...	...	...	136'4	...	...	...	...	...	...	409'1	45'5	...	...	...
Bushire . . .	408 {	...	...	...	...	9'8 2'45	...	129'9	2'5	...	2'5	2'5	9'8	22'1	...	...	2'5	...	19'6	12'3	375'0 2'45	12'3	...	7'4	4'9
Baghdad . . .	40 {	...	...	...	...	...	...	...	...	...	...	25'0	...	...	...	...	...	...	...	...	75'0	25'0	...	...	...

STATIONS GROUPS, AND ARMIES.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE.														
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess	Hepatic Congestion and Inflammation.	Scurvy.	Anæmia and Debility.	Veneral Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhœa.	
Aden . . .	748 {	...	...	...	...	41'4	...	192'5	...	...	...	42'8	53'5	16'0	...	...	21'4	5'3	1'3	572'2	25'4	...	...	1'3
		...	...	...	...	...	...	...	...	...	...	...	1'34	...	...	...	1'34	...	...	4'01	...	...	...	...
Shiraz . . .	385 {	...	...	...	...	220'8	...	...	...	...	13'0	15'6	28'6	7'8	...	...	...	20'8	10'4	483'1	15'6	7'8	...	2'6
		...	...	...	...	...	...	...	...	...	2'60	...	...	...	...	...	...	...	...	5'19	...	...	...	...
Khormaksar . . .	87 {	...	...	...	...	...	...	69'0	...	...	...	57'5	...	...	...	...	...	...	...	390'8	11'5	...	...	...
			
Perim . . .	27 {	...	...	...	...	...	...	...	...	...	...	37'0	222'2	...	...	...	111'1	...	...	444'4	37'0	...	...	...
			
(b) Not in the Indian Command:—																										
Colombo . . .	790 {	...	...	...	...	106'3	...	17'7	...	...	5'1	64'6	25'5	83'6	...	1'3	...	11'4	32'9	546'8	20'3	10'1	15'2	7'6
		...	...	...	...	...	...	...	...	...	1'27	1'27	...	...	...	...	...	...	1'27	5'68	...	1'27	...	...
Singapore . . .	783 {	241'4	3'8	...	1'3	6'4	33'2	2'6	...	5'1	...	106'0	8'9	536'0	31'9	3'8	2'6	2'6	
		...	...	...	...	3'83	...	...	...	1'28	...	1'28	...	1'28	...	...	...	...	1'28	10'22	...	...	...	...
North China Tien-tsin . . .	803 {	32'4	...	3'7	1'2	1'2	82'2	18'7	7'5	18'7	39'9	397'3	22'4	10'0	11'2	18'7	
		...	...	...	...	...	...	...	...	...	1'25	...	1'25	...	...	...	...	...	...	7'47	...	...	...	...
South China, Hong-Kong . . .	3,415 {	8'8	...	3	...	90'2	...	24'6	...	2'1	4'1	2'6	92'8	15'2	10'5	...	2'1	...	16'4	46'9	463'8	22'0	14'1	14'1	18'7	
		88	2'9	5'9	2'9	2'9	2'9	...	5'9	2'9	5'86	...	2'9	
ARMY OF INDIA.		132,232 {	3'4	6	5	1'8	88'9	10'0	44'1	2	9	2'0	6'6	26'2	16'7	13'8	1	1'3	1'1	12'3	14'4	547'5	26'1	3'9	4'5	6'0
		29	02	47	26	...	11	14	21	24	83	17	10	02	05	03	0	08	05	4'42	...	05	...	01
INDIA . . .		125,853 {	3'3	7	5	1'9	88'2	10'5	45'4	2	9	2'0	6'8	23'8	16'2	13'6	...	1'3	1'2	11'6	13'3	550'8	20'0	3'1	3'6	4'9
		30	02	49	23	...	12	14	20	23	85	15	09	02	05	02	01	06	04	4'33	...	03	...	01
NORTHERN ARMY	62,026 {	3'9	3	7	2'3	98'1	19'5	50'2	0	6	2'6	7'9	24'7	13'5	11'4	1	1'3	4	12'7	13'4	633'8	23'3	3'3	4'8	5'2	
		...	18	02	58	23	...	16	02	13	34	1'02	21	10	03	03	05	05	4'48	...	03	...	02	
SOUTHERN „	51,547 {	2'6	1'2	4	1'7	82'7	1'5	42'0	5	1'3	1'5	5'8	25'2	18'9	17'5	2	1'2	2'3	11'6	14'9	505'8	19'5	4'2	3'8	6'9	
		...	48	04	48	27	...	08	33	29	16	80	12	10	02	08	...	02	16	04	4'81	...	04	

INDIAN TROOPS, 1912.

TABLE XVI.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

(The ratios of sickness and mortality will be found in Table XV.)

NORTHERN ARMY.

Dehra Dun.—The Garhi village, which is situated in the centre of Cantonments, will shortly be annexed to the Cantonments, but sanitary measures will be proceeded with cautiously and not rushed.

The extension of incineration is being proceeded with to the greatest extent possible.

The General Officer Commanding the Brigade remarks that the Cantonment of Dehra Dun is, in many respects, quite different from any other Cantonment. The formation of the country—large *nullahs* covered with vegetation—makes sanitation very difficult, as the *jungle* offers opportunities that do not occur in open country for objectionable matter being deposited, and he is quite satisfied that the Cantonment Magistrate is doing his very best, with the means and funds at his disposal, to remedy this.

Dera Ismail Khan.—The river Indus floods the land on the east of the Cantonment, and converts that area into a marsh for six months of the year.

The water supply is ample and is derived from shallow wells. The water is very hard.

The accommodation is ample, but there is still insufficient air space between some of the barracks in Cantonments, especially in the Cavalry lines.

The Assistant Director of Medical Services, Derajat and Bannu Brigades, remarks that the collections of water caused by the Indus around the Cantonments cannot be remedied and defects in canals outside of Cantonment limits are not under Military jurisdiction.

The cattle sheds are very bad and should be rebuilt on another site, but the great expense will require consideration in view of the pending move of the cantonment to Tank.

The Dhobies should be registered and have proper sheds to prevent them taking clothes to their homes.

Private bakeries should be discouraged. Careful attention should be paid to the milking of the dairy cows, pending the provision, at some future date, of more up-to-date stabling and surroundings.

It is proposed to provide drying sheds near the officers Dhobies' ghât, which would not be a costly item.

Killa Drosh.—The barracks are very bad, ill-lighted, ill-ventilated and overcrowded. The kahars' quarters outside the fort are also very overcrowded.

The Cantonment Committee suggests that some extension of the kahars' barracks ought to be undertaken.

Nothing can be done to enlarge the barracks in the fort without increasing the actual size of the fort itself, as there is no space available for the purpose.

The channel conveying the water supply from the spring to the fort ought to be repaired.

Sheds for the storage of litter ought to be provided.

Shillong.—The village Jhalupara is insanitary owing to the habits of the people : some more masonry drains are required. There are a few old houses which are being done away with gradually.

The Assistant Director of Medical Services remarks that some of the barrack rooms and buildings require re-building.

Lahore Cantonment.—There are structural defects in the Indian Infantry lines (West) and the Indian Cavalry lines ; their improvement is under consideration.

Latrines and urinals in the Indian troops lines require an impermeable floor to allow of proper cleaning.

The cells in the Indian Infantry lines (East) are too low and badly ventilated, there are also mounds of earth left after building operations which interfere with the cleanliness and drainage of the surface.

The Cantonment Committee is of opinion that the structural defects in the Indian troops lines are numerous, and economically it would be better to rebuild them; (2) that latrines ought to have a hard, cleansable floor, and this question is now under reference ; and (3) that the Infantry cells (East) should be raised and the ventilation improved.

The Assistant Director of Medical Services, 3rd (Lahore) Division, suggests that a better pattern of latrine is required for Indian lines, etc., and placed nearer the lines (50—100 yards).

Abbottabad.—The water supply is generally somewhat deficient during June and muddy during the rains. That from Kakul also contains a high percentage of microbes, and at present is under very careful examination.

In close proximity to the Cantonment there are numerous small collections of highly insanitary huts and a large tract of swampy cultivation, which are, doubtless, the source of infection of disease, such as enteric fever, dysentery, and cholera.

The prevalence of malaria is chiefly due to the existence of the abovementioned swampy land, which affords an ideal breeding-ground for mosquitos. The only palliative measure would be the addition of this area to Cantonments and its subsequent drainage.

The Sudder bazaar which being controlled by a municipal council, although a mere excrescence of Cantonments, is a constant menace to the health of Cantonments. This year enteric fever and venereal diseases have been imported from it.

The Cantonment Committee suggests (1) the acquisition of land as far out as the link road on the north and east sides of Cantonments. This land is really "tarai" land that is full of springs fed by water which has passed down from the hills under the slope on which the Cantonment is built. High autumn crops are grown on this land every year with the result that millions of mosquitos are bred in the shady pools among the crops.

(2) A small hospital for British officers is urgently needed.

(3) Increased accommodation in all the battery drivers' barracks and in the lines of the Gurkha battalions.

(4) *Pucca* floors for the barracks in place of the loose earthen ones in vogue at present. These latter are a fertile source of infection by tubercle bacilli.

(5) Connected stone drains in all *nullahs* running through Cantonments.

(6) "Wash up" places near cook houses.

The Assistant Director, Medical Services, Abbottabad and Sialkot Brigades, agrees with the suggestions made by the Cantonment Committee, and adds that to ensure a reliable milk supply a well-regulated dairy under official management is required.

The General Officer Commanding the Brigade remarks that the unhealthiness of the station must be attributed to its site. It is cramped into a narrow valley between two hills, and has practically no means of expanding except into the swampy land to the north-east. The site is really too small for the number of troops located here, and it is a pity half of them were not put out at Kakul.

SOUTHERN ARMY.

Bombay.—The water supply is good but inadequate during the month or two immediately preceding the monsoon rains.

The Assistant Director of Medical Services, Bombay Brigade, remarks that the Detail lines are quite unfit for occupation as at present and should be rebuilt.

The Carnegie lines are badly constructed, difficult to keep clean, and in far too close proximity to the town and a large tank which contains filthy water.

Water should be laid on to the hospital in Carnegie lines and a proper washing-place erected ; the hospital dispensary should have a sink.

Rangoon.—There are many ponds in the Cantonment, all of which could be drained but the work would be very costly. The water is used by Dhobies and for watering cattle, gardens, and roads. Part of the Cantonment becomes waterlogged for five months during the monsoon.

The Bohi bazaar is very badly drained, and the question of its removal is the subject of correspondence.

The Assistant Director of Medical Services, Burma Division, remarks that Bohi bazaar occupies one of the best sites in Cantonments ; it is proposed to remove the bazaar, and any suggestion for improving it by costly works need not be considered until the removal question is settled.

The municipality is surrounding the Cantonment with a system of sewers and surface drains, and the Cantonment ought to join before it is too late.

INDIAN TROOPS, 1912.

TABLE XVII.

ENTERIC FEVER by months, stations, groups, and armies.

TABLE XVIII.

MALARIA by months, stations, groups, and armies.

TABLE XIX.

PYREXIA OF UNCERTAIN ORIGIN by months, stations, groups, and armies.

STATIONS* AND GROUPS.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.																
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.		
Port Blair	107
Rangoon	66	
GROUP I.—BURMA COAST AND BAY ISLANDS	173	
Meiktila	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fort Dufferin	506	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhamo	112	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP II.—BURMA INLAND	637	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Manipur	126	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sadiya	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dibrugarh	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP III.—ASSAM.	172	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fort William	35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alipore	343	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Barrackpore	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Buxa	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP IV.—BENGAL AND ORISSA	412	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B		
Dinapore	37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Benares	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Allahabad	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fyzabad	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lucknow	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cawnpore	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fatehgarh	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP V — GANGETIC PLAIN AND CHUTIA NAGPUR	145	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A		
Bareilly	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rurki	44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dehra Dun	287	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meerut	42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Delhi	420	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ambala	143	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B		
Jullundur	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ferozepore	107	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lahore Cantonment.	233	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Amritsar	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sialkot	61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jhelum	163	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rawalpindi	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Campbellpore	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP VI.—UPPER SUB-HIMALAYA	1,569	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Stations where enteric fever, malaria and pyrexia of uncertain origin did not occur are not shown in these tables. For the annual ratios, see Table XV.

INDIAN TROOPS, 1912.

TABLE XVII—*contd.*

ENTERIC FEVER by months,
stations, groups, and armies.

TABLE XVIII—*contd.*

MALARIA by months,
stations, groups, and armies.

TABLE XIX—*contd.*

PYREXIA OF UNCERTAIN ORIGIN
months, stations, groups, and armies.

STATIONS AND GROUPS.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.																
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.		
A																																									
Mardan																	1	1			6	11	41	33	15	168				2		5	2	9	1	7	11	9	46		
Nowshera					2				1			3	7	6	5	5	4	2	3	17	17	45	24	9	144	1	6		3	7	8	1	5	2	6	1	3	43			
Peshawar							1	2				3	5	11	12	4	2	3	1	15	42	91	58	7	251	2	1	8	14	14		8	4		7	10		76			
Fort Jamrud									1			1	3							1			3		9			1		1								1	3		
Kohat			1	3	3	3	1	2	1	2		1	19	7	4	10	27	48	32	55	73	117	147	39	578		1		6	4		4	2						17		
Thal														2		1	1	1		12	9	5	7	2	40						2							2			
Edwardesabad				1						2		3	3	6	9	7	8	16	13	8	29	65	68	19	251	2			1	1	5	1	6	4	22	14	23	79			
Tank				2				1	2			5	1		1	2	14	1	1		4	9	11	2	46	2			2		3	2		28	12	25	11	85			
Dera Ismail Khan						1				1		2	7	24	13	13	59	33	14	27	37	227	159	78	759	2	5	2	6	19	15	12	13	20	8			102			
Jatta																													1						2			3			
Drazand																					1		1	1	3			2		2	1						5				
Fort Zam													1												1																
Fort Abazai										2		2	1	3						1	2	1	16	8	3	47	2	1			1	1		4	2		2	1	14		
Multan			2	1	1	1				2		7	2	5	10	23	11	2			4	5	3		68	9	4	4	1	12	9	15	34	35	22	9	4		158		
Fort Shabkadar							1					1					3	3	2		12		4	33																	
B																																									
Jandola													4										21	17	8	50		1			1	3	1	2	1	3		1	13		
Sibi																1							1	2	1	5	1		2	2	3		1				2	3	14		
C																																									
Jacobabad																	1		1				12			14					1				1	1	8		11		
Hyderabad														2	1	6	6	2	1			1	10	5	40																
Karachi														1		1		1	3			8			14	1		1	1				1				6	2	12		
GROUP VII.— NORTH - WEST FRONTIER, INDUS VALLEY AND NORTH-WESTERN RAJPUTANA	2	2	7	6	4	2	6	6	8		1	4	12	67	55	73	138	112	73	145	251	679	548	195	2,461	22	19	21	38	66	60	48	79	96	88	88	58	633			
A																																									
Rajkot																						2	3	2	1	8	1	1								6	17	10	6	41	
Deesa													2		2								2	7	1	14	1	3	2	8	2	18	44	12	15	14	7	1	131		
Ahmedabad															1						1	4	1		8	1			2					2		4	2	7	18		
Baroda													11	3	5	1	1	1				1	20	36	76	155									2	17	94	107	8	228	
B																																									
Erinpura	1	2	1							1		5	3							2	3	4	6	5	2	25									1				1		
Neemuch																1	1	2		1		1	3	4	1	14															
Deoli														1	1		1	1		7	2	8	3		24			1								1		2			
Nasirabad															2	1	1	1			1			1		7	1			1		2	1	5		4		14			
Ajmer					1							1	1			1				1				4		7						2						2			
Jaipur													1												1																
Agra				1								1			1	4	3	2	4	5	16	14	21	1	65																
Jhansi						2			4	7		13	13	4	2	4	1	13	22	24	39	43	13	8	186	3		3	3	5			2		4				20		
Nowgong													4	3	1	4	3	1	3	6	8	3	10		46					3		1						4			
Goona																							5		5												2	2			
Agar																2						2		1		5															
Sehore															1	2	5	2	4		1	8	13		36			1	1	1								3			
Indore																								3	3																
Mhow							1	1	2			4	5	2	23	13	11	9	6	5	14	17	22	9	136	4					2	3	5		1			15			
GROUP VIII.— SOUTH - EASTERN RAJPUTANA, CENTRAL INDIA, AND GUJARAT	2	2	1	1	3			5	8	4		26	13	40	33	28	30	43	52	88	133	142	103	74	11	4	7	14	12	22	50	25	47	135	132	22	481				

TABLE XVII—concl'd.

TABLE XVIII—concl'd.

TABLE XIX—concl'd.

ENTERIC FEVER by months, stations, groups, and armies.

MALARIA by months, stations, groups, and armies.

PYREXIA OF UNCERTAIN ORIGIN by months, stations, groups, and armies.

STATIONS, GROUPS, AND ARMIES.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.																
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.		
A																																									
Saugor . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	1	6	3	9	3	13	10	4	7	8	11	7	13	94	...	...	1	...	1	5	9	17	20	24	15	6	98
Jubbulpore	1	2	3	13	7	1	1	7	7	5	27	22	16	8	7	121	1	1	
Kamptee	13	8	1	3	7	4	7	1	22	11	3	6	86	1	3	2	3	1	10	
B																																									
Aurangabad	1	...	2	8	1	1	13	18	12	26	3	4	11	10	9	24	13	6	6	142	2	5	2	...	1	...	7	22	9	48	
Ahmednagar	2	1	1	2	1	2	2	3	3	17	1	...	2	3	5	1	1	13	
Bolarum . . . . .	...	2	...	...	...	...	...	...	...	...	...	...	5	4	...	1	...	...	...	...	1	4	4	5	46	65	5	...	2	...	...	3	3	1	2	...	...	2	18
Secunderabad	10	...	...	...	...	...	1	3	2	1	...	...	17	3	4	8	13	3	6	43	25	18	19	23	6	168	21	17	19	16	19	14	14	12	11	1	...	...	144
Belgaum . . . . .	...	...	...	...	...	...	1	...	1	...	...	...	2	1	4	32	31	13	5	8	...	2	2	7	7	112	...	2	1	5	4	2	6	5	3	7	4	9	48
Satara . . . . .	...	...	...	...	...	...	1	...	...	...	...	...	1	...	3	...	...	2	1	1	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	1	...	...	1
Poona	1	...	...	...	...	4	...	1	...	1	...	...	7	15	20	7	7	2	4	5	4	3	2	10	11	90	26	17	9	28	27	41	8	11	19	19	15	13	233
Kirkee . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	1	19	6	7	27	21	4	8	3	...	8	4	2	109	17	16	38	15	6	6	9	7	12	7	15	4	152
GROUP IX.—DECCAN	14	1	2	8	...	...	8	5	7	3	2	...	50	94	68	93	90	73	54	91	78	100	88	76	107	1,012	73	55	74	75	67	71	49	54	72	83	59	34	766
Bombay	47	33	14	16	7	6	9	8	20	28	12	4	204	1	1	6	2	15	2	5	2	34	
Santa Cruz . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	1	1	7	12	5	10	5	44	4	4	1	...	3	...	1	...	...	...	...	...	14
Cannanore . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	2
Trivandrum . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP X.—WESTERN COAST	47	35	15	17	7	9	10	15	32	33	33	9	252	5	4	2	...	3	1	8	2	16	2	5	2	50
A																																									
Bangalore	1	105	66	47	96	52	41	36	36	35	35	52	39	640	11	1	8	3	2	5	6	36	
B																																									
Trichinopoly	2	...	3	...	1	1	...	1	...	1	1	1	11	1	1	1	3
St. Thomas' Mount	2	1	1	7	...	1	3	1	...	3	3	1	12
Madras	3	1	1	...	2	1	1	1	2	1	13	
GROUP XI.—SOUTHERN INDIA	110	69	51	96	55	43	37	39	36	37	56	42	671	12	5	9	3	...	9	8	51	
Maymyo	10	4	1	...	1	7	1	7	10	19	36	25	127	...	1	3	...	2	4	3	9	22	
Kohima	2	1	1	7	1	2	8	6	3	31	1	4	3	1	2	...	3	14	
Shillong	1	...	1	...	1	2	5	8	5	1	3	11	38	11	29	10	14	10	11	151	2	...	1	...	2	1	2	5	7	1	2	25	
Gangtok . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	10	9	8	30	...	2	2	1	...	2	...	...	1	1	...	...	9
Takdah . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	2	1	3	1	5	9	25	...	...	...	...	...	...	...	...	...	...	...	...	1
Almora . . . . .	...	...	...	1	2	1	1	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...						

TABLE XX

CHOLERA by months, stations, groups,
and armies

TABLE XXI

DYSENTERY by months, stations,
groups, and armies.

TABLE XXII

DIARRHŒA by months, stations,
groups, and armies.

STATIONS* AND GROUPS.	ADMISSIONS FROM CHOLERA IN EACH MONTH.												ADMISSIONS FROM DYSENTERY IN EACH MONTH.												ADMISSIONS FROM DIARRHŒA IN EACH MONTH.														
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Rangoon	9	1	1	1	9	1	...	2	4
GROUP I.—BURMA COAST AND BAY ISLANDS	9	1	1	1	9	1	...	2	4
Meiktila	5	...	...	...	...	...	...	1	...	1	1	1	5	...	...	...	2	...	...	...	...	...	...	...	2		
Fort Dufferin	10	1	3	3	10	22	5	2	38	
Bhamo	11	3	...	2	8	4	1	35
GROUP II.—BURMA INLAND	15	1	4	3	1	1	1	15	75	
Manipur	22	22	2	
Sadiya	4	4	1	
Dibrugarh	2	2	13	
GROUP III.—ASSAM	28	28	16	
Fort William	10	10	3	
Alipore	33	33	1	
Barrackpore	2	2	4	
GROUP IV.—BENGAL AND ORISSA	45	45	8	
B	
Dinapore	1	1	14	
Benares	4	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4		
Allahabad	21	...	...	...	...	...	...	...	...	...	...	...	...	21	...	...	...	...	...	...	...	...	...	...	5		
Fyzabad	12	...	...	...	...	...	...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	...	...	...	9		
Lucknow	18	...	...	...	...	...	...	...	...	...	...	...	...	18	...	...	...	...	...	...	...	...	...	...	14		
Cawnpore	9	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	...	...	...	...	...	...	...	5		
Fatehgarh	3		
GROUP V.—GANGETIC PLAIN AND CHUTIA NAGPUR	65	65	54	
A	
Bareilly	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	17		
Rurki	1		
Dehra Dun	15	...	...	...	...	...	...	...	...	...	...	...	...	15	...	...	...	...	...	...	...	...	...	...	34		
Meerut	12	...	...	...	...	...	...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	...	...	...	14		
Delhi	6	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	24		
Ambala	26	...	...	...	...	...	...	...	...	...	...	...	...	26	...	...	...	...	...	...	...	...	...	...	14		
B		
Jullundur	25	...	...	...	...	...	...	...	...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	...	15		
Ferozepore	22	...	...	...	...	...	...	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	...	14		
Lahore Cantonment	56	...	...	...	...	...	...	...	...	...	...	...	...	56	...	...	...	...	...	...	...	...	...	...	33		
Amritsar	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2		
Sialkot	14	...	...	...	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	10		
Thelum	67	...	...	...	...	...	...	...	...	...	...	...	...	67	...	...	...	...	...	...	...	...	...	...	22		
Rawalpindi	37	...	...	...	...	...	...	...	...	...	...	...	...	37	...	...	...	...	...	...	...	...	...	...	28		
Campbellpore	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	10		
GROUP VI.—UPPER SUE-HIMALAYA	283	283	238	

* Stations where Cholera, Dysentery and Diarrhœa did not occur are not shown in these tables. For the annual ratios, see Table XV.

INDIAN TROOPS, 1912.

TABLE XX-*contd.*

*CHOLERA by months, stations,
groups, and armies.*

TABLE XXI—*contd.*

*DYSENTERY by months, stations,
groups, and armies.*

TABLE XXII-*contd.*

*DIARRHŒA by months, stations,
groups, and armies.*

[illegible]

INDIAN TROOPS, 1912.

TABLE XX—contd.

CHOLERA by months, stations, groups, and armies.

TABLE XXI—contd.

DYSENTERY by months, stations, groups, and armies.

TABLE XXII—contd.

DIARRHŒA by months, stations, groups, and armies.

STATIONS AND GROUPS.	ADMISSIONS FROM CHOLERA IN EACH MONTH.												ADMISSIONS FROM DYSENTERY IN EACH MONTH.												ADMISSIONS FROM DIARRHŒA IN EACH MONTH.															
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	
B																																								
Aurangabad							1	1	1				3	7	2	9	2	3	6	7	3	1				40	1					1	7	16	5	2	1		33	
Ahmednagar					1					2			3	4	4							1				9				2	1			2	2	1	1		10	
Bolarum								4	1				5						1			2			8		1								3	1		5		
Secunderabad				2	1	1	2	9	11	2			28		1	1	1	1	5	14	10	10	8	1	53	2	2	2				1	7	20	2	3	1	40		
Belgaum															2	1	3	3	1	4		2	2	1	19			1				4	8	5	1			19		
Satara					2	1							3						1						1						3	1	2					6		
Poona							2						2	9	5	9	1	2	13	11	17	7	7	8	92		3	3	3	2	9	8	7	7	5	3		50		
Kirkee														1	3	1				2	9	3	2		22			2	3	4	6	8	17	4	6	3		53		
GROUP IX.— DECCAN.				2	4	2	6	14	13	4			45	22	19	24	8	9	24	31	51	30	28	22	10	278	5	6	8	9	10	19	31	59	56	25	24	5	257	
Bombay				1									1	17	16	14	2	2		4				2	2	59	16	4	1	2	3	2	9	12	2	6		11	68	
Santa Cruz														9	3	5	2	4	3	5	9	5	4	6	5	60												2		
Cannanore																			1						1													1		
Trivandrum																			1	1					2				1									1		
GROUP X.— WESTERN COAST.				1									1	26	19	19	4	6	5	10	9	5	4	8	7	122	16	4	1	3	3	3	9	14	2	6		11	72	
A																																								
Bangalore														1	4	6		2	5	5	2	2	1	4	2	34	4	2		1	2	7	4	5	2		2		29	
B																																								
Trichinopoly	1												1	2	1	1							2	1	7											1	1	2		
St. Thomas' Mount																																							3	
Madras																												1		1		1						1	4	
GROUP XI.— SOUTHERN INDIA	1												1	3	5	7		2	5	5	2	2	1	6	3	41	7	3	1	1	3	7	4	5	2		3	2	38	
Maymyo																			4						4	1	2		2			7	11	7	1	1	1	3	36	
Kohima																			1		2		1	2	6															
Shillong																	3	2	1	5	3	4	3		21				1			2	1					4		
Gangtok																																							2	
Takdah																																		2	5	2				10
Almora																																							2	
Naini Tal																																							1	
Lansdowne																																							19	
Simla																																							2	
Jutogh																																							1	
Dharmasala																			2	2	3	1	1		9													2		
Bakloh																																							6	
Khairagali																																								
Baragully																			1	2			1		4															
Kalabagh																			1	1					2															
Chitral																																								
Kila Drosch																																							3	
Malakand														1	1					1					3													9		
Dargai														1											1													3		
Chakdara																	2	3							5													3		
Abbottabad														2	2	5	1	9	4	6	6	5	4	5	2	51												19		
Cherat																																							1	
Hangu																																								
Mir Ali Khel																																								
Fort Sandeman																																								
Hindu Bagh																																								
Musa Khel																																							</	

INDIAN TROOPS, 1912.

TABLE XX.—*concl'd.*

*CHOLERA by months, stations, groups,
and armies.*

TABLE XXI—*concl'd.*

*DYSENTERY by months, stations, groups,
and armies.*

TABLE XXII—*concl'd.*

*DIARRHŒA by months, stations, groups,
and armies.*

STATIONS, GROUPS, AND ARMIES.	ADMISSIONS FROM CHOLERA IN EACH MONTH.												ADMISSIONS FROM DYSENTERY IN EACH MONTH.												ADMISSIONS FROM DIARRHŒA IN EACH MONTH.														
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Killa Saifulla	1	1	1	1
Murgha	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	2	..	3	
Loralai	2	..	..	1	..	..	..	1	..	..	12	
Gumbaz	
Quetta	
Robat	
Pishin	
Shelabagh	
GROUP XII.—HILL STATIONS.	1	..	..	..	..	..	..	4	4	10	8	26	15	15	22	17	13	9	2	145	7	8	16	10	33	38	63	61	41	46	23	15	361	
Marching, India	1	..	..	..	..	1	..	..	13	6	29	19	21	8	3	11	9	18	55	41	233	6	4	4	4	8	6	..	2	7	8	32	27	108	
Abor Expedition	10	3	8	22	8	..	..	..	..	..	..	..	51	..	..	..	..	..	..	..	..	..	..	..	..	..
EXTRA INDIA. (a) In the Indian Command :—																																							
Charbar	1	3	..	..	..	..	1	..	1	2	1	10	19	2	1	..	..	..	..	..	1	1	..	..	..	5	
Jask	6	..	5	3	13	33	10	10	12	11	7	18	128	..	..	1	..	5	1	1	..	..	..	5	..	13	
Muscat	2	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Bushire	5	1	1	..	..	..	..	..	1	..	..	1	9	..	..	..	..	..	..	..	..	..	..	..	..	..
Aden	9	..	2	12	..	..	4	4	6	2	1	40	..	..	1	..	..	3	4	1	1	..	2	12		
Shiraz	2	..	1	2	..	1	..	1	3	1	..	11	..	..	..	..	..	..	2	..	1	..	..	3		
Perim	1	..	..	..	..	2	3	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..
(b) Not in the Indian Command :—																																							
Colombo (Ceylon)	2	1	4	1	..	..	1	1	1	5	1	3	20	2	2	5	2	6	4	3	3	16	18	4	1	66	
Singapore	1	..	5	2	1	12	4	1	..	..	..	..	26	1	..	..	..	..	..	1	..	..	..	..	..	2	
Tient-sin (North China)	1	1	6	3	1	1	1	1	15	1	..	..	..	..	..	1	1	2	..	1	6		
Hong-Kong (South China)	2	2	..	1	3	6	6	20	6	1	3	2	52	1	1	..	2	..	5	6	5	6	2	4	4	36	
ARMY OF INDIA .	1	3	16	3	6	33	17	6	85	172	137	182	134	166	156	154	205	222	228	232	160	2,208	65	61	82	92	131	174	185	274	251	198	191	122	1,826
NORTHERN ARMY	1	1	..	18	..	1	21	71	44	64	63	71	48	48	69	106	100	105	47	836	12	24	30	49	62	53	67	102	87	84	91	45	706
SOUTHERN ARMY .	1	3	14	2	6	15	17	4	62	73	81	72	26	61	81	86	160	99	103	67	66	975	42	30	43	35	55	106	108	161	134	84	60	44	902

III.—PRISONERS, 1912.

TABLE D.

FAILS by ADMINISTRATIONS.

JAILS.	Height above the sea-level in feet.*	Authority for height.†	JAILS.	Height above the sea-level in feet.*	Authority for height.†	JAILS.	Height above the sea-level in feet.*	Authority for height.†
ANDAMANS :—			BIHAR AND ORISSA—contd.			N.-W. F. PROVINCE :—		
Port Blair Convict Settlement	85	S. G.	Gaya	375	M. D.	Peshawar	1,165	S. G.
BURMA :—			Bhagalpur, Central	147	S. G.	Kohat	1,768	"
Mergui	14	S. G.	Monghyr	148	"	Bannu	1,279	"
Tavoy	69	"	Darbhanga	167	"	Dera Ismail Khan	571	"
Moulmein	288	"	Champarun (Motihari)	217	"	Abbottabad	4,166	"
Shwegyin	128	"	Muzaffarpur	179	"			
Toungoo	156	"	Patna (Bankipore)	177	"			
Rangoon, Central, Europeans	14	"	Arrah (Shahabad)	191	M. D.			
" " Indians	...	"	Chapra (Saran)	181	S. G.			
Maubin	...	"	Buxar, Central	204	"	BALUCHISTAN :—		
Myaungmya, Central	...	"	Sambalpur	500	"	Sibi	489	S. G.
Bassein, Central	40	S. G.				Quetta	5,511	"
Insein	34	"						
Henzada	44	"	UNITED PROVINCES OF AGRA					
Myanaung	74	"	AND OUDH :—					
Sandoway	...	"	Korantadih (Ballia)	...	"	RAJPUTANA :—		
Kyaukpypu	...	"	Ghazipur	227	S. G.	Ajmer	1,627	S. G.
Akyab	32	S. G.	Azamgarh	256	"			
Paungde	...	"	Gorakhpur	255	"			
Prome	149	S. G.	Basti	292	"			
Thayetmyo, Central	145	"	Fyzabad	336	"	CENTRAL PROVINCES :—		
Magwe	...	"	Sultanpur	305	I. B.	Damoh	1,236	S. G.
Yamethin	653	S. G.	Rai Bareilly	351	S. G.	Saugor	1,753	"
Meiktila	860	"	Partabgarh	317	"	Jubbulpore, Central	1,306	"
Pagan	...	"	Jaunpur	263	"	Narsinghpur	1,305	I. B.
Myingyan, Central	243	S. G.	Benares, Central	...	"	Mandla	1,487	S. G.
Mandalay	249	"	" District	256	"	Bilaspur	887	"
Monywa	250	"	Mirzapur	283	"	Raipur, Central	968	"
Shwebo	600	M. O.	Allahabad, Central (Naini)	...	"	Balaghat (Burha)	...	"
Mogok	...	"	" District	298	"	Seoni	2,043	S. G.
Bhamo	351	S. G.	Karwi	...	"	Chhindwara	2,236	"
Katha	329	"	Banda	415	S. G.	Hoshangabad	1,030	"
Kindat	361	"	Fatehpur	373	"	Nimar (Khandwa)	1,042	I. B.
			Hamirpur	367	"	Betul	2,189	S. G.
ASSAM :—			Orai (Jalaun)	...	"	Nagpur, Central	1,025	"
Cachar (Silchar)	104	M. D.	Cawnpore	417	S. G.	Bhandara	861	"
Jorhat	295	S. G.	Unao	412	"	Wardha	935	"
Dibrugarh	342	"	Lucknow, Central	...	"	Chanda	658	"
Tezpur	292	"	" District	400	"	Yeotmal	1,476	"
Nowgong	208	"	Barabanki	378	"	Amraoti	1,194	"
Gauhati	134	I. B.	Gonda	...	"	Akola	920	"
Dhubri	158	"	Bahraich	398	S. G.	Buldana	2,132	M. D.
Sylhet	257	M. D.	Kheri	471	"			
Aijal	3,917	S. G.	Sitapur	449	"			
Kohima	4,500	I. B.	Hardoi	462	"			
Shillong	4,987	"	Etawah	498	"			
			Mainpuri	511	"			
BENGAL :—			Etah	550	"	HYDERABAD RESIDENCY JAIL :—		
Mymensingh	59	M. D.	Fatehgarh, Central	...	"	Secunderabad	1,732	S. G.
Dacca, Central	20	"	" District	444	I. B.			
Tippera (Comilla)	36	"	Shahjahanpur	507	S. G.	BOMBAY :—		
Chittagong	87	"	Pilibhit	614	"	Shikarpur	194	S. G.
Noakhali	43	"	Bareilly, Central	...	"	Sukkur	...	"
Bakarganj (Barisal)	13	"	" District	560	"	Sind Gang	...	"
Khulna	...	"	" Juvenile	...	"	Hyderabad, Central	134	I. B.
Jessore	33	"	Budaun	544	"	Karachi	28	S. G.
Baraset	...	"	Aligarh	610	"	Rajkot	414	"
Presidency, Central (Europeans)	17	S. G.	Bulandshahr	727	"	Ahmedabad, Central	170	"
Presidency, Central (Indians)	...	"	Moradabad	655	"	Dhulia	842	"

* These are not the exact heights of the jails themselves above sea-level, but usually those of the survey-marks or of the mercury-surface in barometer cisterns in the stations in which the jails are situated.

† S. G. = Surveyor-General of India; I. B. = Intelligence Branch of the Division of the Chief of the Staff; M. D. = Meteorological Department; M. O. = Medical Officers in charge of Station Hospitals in their Sanitary Reports.

TABLE XXIII.

RATIOS of ADMINISTRATIONS.

The ratios of admissions and deaths to strength are taken from Table XXV.

	RATIOS PER 1,000 OF THE AVERAGE STRENGTH.												
	Burma.	Assam.	Bengal.	Bihar and Orissa.	United Provinces.	Punjab.	N.W.F. Province.	Central Provinces.	Bombay.	Madras.	India.*	Andamans.	India.†
I.—AVERAGE ANNUAL STRENGTH .	16,339	1,600	10,621	6,320	22,327	12,010	1,622	3,130	9,053	9,056	92,626	11,280	103,906
II.—CONSTANTLY SICK RATE OF THE YEAR	15'1	39'4	43'7	31'6	23'4	28'6	22'2	14'1	21'5	19'9	25'0	75'4	30'5
INCLUDING SUBSIDIARY JAILS AND LOCK-UPS . . . . .	...	36'6	41'9	30'3	...	27'9	21'1	14'0	20'1	19'1	24'3	...	29'5
III.—ADMISSION RATE OF THE YEAR—													
Influenza	'1	...	2'3	...	2'9	...	...	8'9	'1	'7	1'3	...	1'2
Cholera	2'3	1'9	'4	3'2	...	'1	...	'3	4'4	2'5	1'4	...	1'3
Small-pox	'8	'6	'9	...	'6	1'7	...	'3	1'3	...	'8	...	'7
Enteric Fever	1'2	...	1'6	'8	'5	'2	1'8	'6	'9	1'3	'9	...	'8
Malaria	30'4	152'5	252'1	179'3	74'2	137'3	357'9	49'5	67'0	49'1	105'2	993'7	201'6
Pyrexia of uncertain origin	27'8	23'8	9'6	4'6	6'9	15'3	27'7	11'8	23'2	50'9	18'6	6'1	17'3
Tubercle of the Lungs	7'7	5'0	12'5	13'6	7'4	17'5	3'7	8'0	5'5	8'8	9'6	8'1	9'5
Pneumonia	3'7	13'1	7'5	5'2	9'7	16'5	11'7	5'4	7'0	2'9	8'0	17'8	9'1
Respiratory Diseases	13'5	30'6	41'6	31'5	17'6	37'0	8'0	10'9	24'0	21'9	24'0	74'2	29'4
Dysentery	20'6	291'9	160'9	100'9	24'6	39'0	41'3	60'7	41'0	34'8	55'4	99'1	60'2
Diarrhœa	6'7	69'4	115'6	125'6	15'3	41'1	33'3	35'8	40'8	19'2	41'2	45'9	41'7
Spleen Diseases	'1	...	'1	'3	'2	'9	'6	'3	'3	...	'3	...	'2
Scurvy	5'2	26'2	'6	'2	'0	...	1'8	...	5'7	...	2'1	2'4	2'1
Anæmia and Debility	3'4	14'4	17'0	18'0	7'8	24'1	5'5	5'1	8'8	3'4	10'6	'4	9'5
Abscess, Ulcer, and Boil	28'6	33'8	62'5	63'8	81'7	95'2	121'5	42'8	50'9	28'9	61'3	56'6	60'8
ALL CAUSES	288'9	900'6	973'3	782'3	425'7	604'5	828'6	406'4	483'4	428'2	535'6	1,624'2	653'8
INCLUDING SUBSIDIARY JAILS AND LOCK-UPS . . . . .	...	866'6	964'3	773'1	...	603'2	831'5	406'0	516'6	498'7	547'5	...	657'7
IV.—DEATH RATE OF THE YEAR—													
Cholera	1'84	'62	'28	1'27	...	...	...	...	1'88	1'33	'77	...	'68
Small-pox	'24	...	'28	...	...	'42	...	...	...	...	'13	...	'12
Enteric Fever	'18	...	'47	...	'09	...	...	...	'11	...	'12	...	'11
Malaria	'43	1'25	1'69	'32	'40	'17	'62	'32	'33	'22	'52	2'57	'74
Pyrexia of uncertain origin	'06	...	'09	...	...	'17	...	...	...	...	'04	'44	'09
Tubercle of the Lungs	4'47	1'88	3'30	3'96	2'02	5'16	'62	3'51	1'99	2'32	3'18	5'23	3'41
Pneumonia	1'10	3'13	1'79	1'74	1'61	3'33	'62	1'28	2'32	'33	1'72	6'21	2'20
Respiratory Diseases	'86	3'75	1'13	'16	'63	'33	1'23	2'24	'77	'66	'79	1'60	'88
Dysentery	2'39	15'62	4'05	2'69	1'88	2'58	1'85	3'83	1'99	1'10	2'59	6'03	2'96
Diarrhœa	'18	1'25	1'41	'95	'40	'83	1'23	1'92	1'55	'55	'79	'44	'75
Hepatic Abscess	'18	...	'09	'16	...	'08	...	...	...	...	'06	'18	'08
Anæmia and Debility	'18	'62	'56	'79	'13	'17	...	...	'55	...	'27	'09	'25
Phagedæna, Slough, and Gangrene	'12	...	...	'16	...	'08	...	...	...	'11	'05	'09	'06
ALL CAUSES	20'69	37'50	21'84	17'83	10'48	19'15	11'71	19'81	17'23	11'37	16'74	31'65	18'36
INCLUDING SUBSIDIARY JAILS AND LOCK-UPS . . . . .	...	36'09	21'79	17'54	...	18'87	11'12	19'79	15'96	11'56	16'60	...	18'14

* Including Sibi, Quetta, Ajmer, Secunderabad, Mercara and excluding Andamans.

† Including Sibi, Quetta, Ajmer, Secunderabad, Mercara and Andamans.

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TABLE XXIV.

RATIOS of GEOGRAPHICAL GROUPS.

The ratios of admissions and deaths to strength are taken from Table XXV.

	RATIOS PER 1,000 OF THE AVERAGE STRENGTH.												
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
	Burma Coast and Bay Islands.	Burma Inland.	Assam.	Bengal and Orissa.	Gange- tic Plain and Chutia Nagpur.	Upper Sub- Hima- laya.	N.-W. Frontier, Indus Valley, and N.-W. Rajput- ana.	S.-E. Rajput- ana, Central India, and Gujarat.	Dec- can.	West- ern Coast.	South- ern India.	Hills.	India.
I.—AVERAGE ANNUAL STRENGTH . . .	11,153	5,186	1,516	11,396	19,490	12,570	9,219	3,979	7,014	2,208	8,310	534	92,626
II.—CONSTANTLY SICK RATE OF THE YEAR .	16'0	13'3	40'2	42'7	26'4	28'2	21'5	23'1	18'8	20'4	20'1	28'1	25'0
III.—ADMISSION RATE OF THE YEAR—													
Influenza . . . . .	...	'2	...	2'1	'4	4'5	'1	...	4'0	...	'7	...	1'3
Cholera	'6	6'0	2'0	1'8	'2	'1	...	4'0	3'3	'9	2'8	...	1'4
Small-pox	'4	1'7	'7	'9	'1	1'4	1'2	3'3	'4	'5	...	...	'8
Enteric Fever	1'5	'4	...	1'5	'6	'5	'3	'3	'6	2'3	1'4	5'6	'9
Malaria	32'5	25'6	149'1	243'6	101'8	135'2	128'3	76'7	54'6	68'8	48'6	250'9	105'2
Pyrexia of uncertain origin	36'2	9'8	25'1	10'4	7'4	15'0	6'6	2'3	34'6	5'4	54'5	7'5	18'6
Tubercle of the Lungs	7'2	8'9	5'3	12'6	7'6	16'4	11'1	4'3	6'8	11'3	7'8	3'7	9'6
Pneumonia	3'0	5'8	13'2	7'4	6'2	16'9	13'5	6'0	6'6	6'8	3'0	22'5	8'0
Respiratory Diseases	15'7	8'9	29'7	39'8	21'7	22'4	36'0	18'3	15'5	30'3	21'7	67'4	24'0
Dysentery	22'2	17'0	294'9	157'2	45'3	29'7	35'5	20'9	56'2	53'0	37'4	125'5	55'4
Diarrhœa	7'3	5'6	69'9	112'0	49'3	35'0	20'3	23'1	48'5	32'2	30'9	106'7	41'2
Spleen Diseases	'2	...	...	'1	'2	'9	'8	...	'1	...	...	...	'3
Scurvy	7'5	'2	27'7	'6	...	...	5'9	'3	'3	...	...	...	2'1
Anæmia and Debility	4'3	1'3	13'9	18'6	8'3	18'0	16'5	15'8	5'1	11'3	3'0	11'2	10'6
Abscess, Ulcer, and Boil	33'5	18'1	31'0	62'2	81'4	87'7	85'2	59'6	55'0	44'4	25'9	80'5	61'3
ALL CAUSES	317'3	227'7	903'7	952'4	525'6	565'2	542'6	415'4	510'4	446'6	429'8	985'0	535'6
IV.—DEATH RATE OF THE YEAR—													
Cholera	'45	4'82	'66	'79	'10	...	...	1'76	1'43	...	1'44	...	'77
Small-pox	'18	'39	...	'26	...	'32	'11	...	...	...	...	...	'13
Enteric Fever	'18	'19	...	'44	'05	'08	...	...	'14	...	...	...	'12
Malaria	'09	1'16	1'32	1'58	'41	'24	'33	'75	'29	...	'24	...	'52
Pyrexia of uncertain origin	'09	...	...	'09	...	'08	'11	...	...	...	...	...	'04
Tubercle of the Lungs	4'39	4'63	1'98	3'25	2'72	3'90	3'47	2'01	2'28	1'81	2'41	...	3'18
Pneumonia	1'08	1'16	3'30	1'76	1'54	2'47	3'04	1'26	1'71	1'81	'36	5'62	1'72
Respiratory Diseases	'72	1'16	3'96	1'05	'36	'56	'65	1'26	1'28	'45	'72	...	'79
Dysentery	2'96	1'16	15'83	3'86	2'26	2'31	1'63	2'01	2'71	1'81	1'20	7'49	2'59
Diarrhœa	'27	...	1'32	1'40	'62	'80	'54	'75	1'14	3'62	'60	1'87	'79
Hepatic Abscess	'27	...	...	'09	'05	'08	...	...	...	...	...	...	'06
Anæmia and Debility	'27	...	'66	'70	'31	'16	'11	'25	'29	'45	...	...	'27
Phagedæna, Slough, and Gangrene .	'09	'19	...	...	'05	'08	...	...	...	...	'12	...	'05
ALL CAUSES	20'62	20'83	38'92	22'20	12'26	15'43	16'49	14'58	16'11	14'95	12'03	22'47	16'74

* including Aden.

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TABLE XXV

RATIOS of FAILS, GROUPS, and ADMINISTRATIONS.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.											2. DEATH RATE PER 1,000 OF STRENGTH.											Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.				
Mergui .	94 {	...	...	...	...	85.1	...	31.9	...	...	21.3	95.7	...	...	...	...	...	95.7	...	57.4.5 10.64	21.3
Tavoy .	145 {	...	...	...	...	6.9	...	...	...	...	...	96.6 34.48	...	6.90	...	...	...	13.8	...	172.4 48.28	6.9
Moulmein .	590 {	...	...	...	6.8 1.69	55.9	...	49.2	5.1 3.39	3.4	11.9	10.2 1.69	...	1.7	...	...	1.7 1.69	15.3	...	203.4 13.56	16.9
Shwegyin .	175 {	...	5.7 5.71	...	...	22.9	...	...	...	...	...	...	5.7	...	5.7 5.71	...	11.4	34.3	...	142.9 11.43	5.7
Toungoo .	703 {	...	...	...	...	19.9	...	7.1	4.3 2.84	2.8	4.3	15.6 4.27	...	...	...	...	2.8 1.42	48.4	...	226.2 14.22	11.4
Rangoon, Central (Europeans).	23 {	...	...	...	...	87.0	...	217.4	43.5	...	...	173.9	...	...	...	...	...	43.5	...	1,130.4 ...	43.5
Rangoon, Central (Indians).	2,661 {	...	...	...	...	62.0	...	87.9 38	14.3 7.89	4.1 1.88	24.8 1.88	27.8 5.26	23.3 38	8 38	4 38	31.6 38	8.6	60.5	4 38	606.5 40.96	21.0
Maubin .	214 {	...	...	...	...	...	...	9.3	4.7	...	23.4	14.0	...	...	...	...	...	4.7	...	210.3 9.35	14.0
Myaungmya, Central.	1,069 {	...	9 94	1.9	...	20.6	...	6.5	2.8 94	...	11.2	6.5	2.8	...	...	...	9	11.2	...	128.2 5.61	6.5
Bassein, Central	1,247 {	...	80 80	8	5.6	31.3	...	24.9	4.0 1.60	...	5.6 80	13.6	4.8 1.60	...	...	...	3.2	16.0	...	213.3 12.03	7.2
Insein, Central	2,808 {	...	7 36	...	7	4.6	...	25.3	8.2 7.12	5.0 1.78	21.4 36	1.4 3.6	4 36	...	36	...	1.4 36	20.7	...	183.8 14.96	14.6			
Henzada .	589 {	...	5.1 1.70	1.7	6.8 1.70	3.4	...	13.6	...	...	8.5	15.3 5.09	...	...	...	...	5.1	37.4	...	259.8 22.07	15.3
Myanaung .	83 {	...	...	...	...	...	...	...	...	...	12.0	12.0	24.1	...	...	...	...	36.1	...	228.9 12.05	12.0
Sandoway .	96 {	...	...	...	...	20.8	...	...	...	...	...	...	...	...	...	...	10.4	...	...	104.2 ...	20.8
Kyaukpyu .	118 {	...	...	...	...	35.9 8.47	...	8.5	16.9 8.47	...	42.4	59.3	25.4	...	...	...	33.9	76.3	...	957.6 25.42	33.9
Akyab .	538 {	...	...	...	...	29.7	...	14.9	1.9	1.9 1.86	3.7 1.86	152.4 11.15	5.6	...	...	...	5.6	50.2	...	477.75 20.45	42.8
GROUP I.—BURMA COAST AND BAY ISLANDS	11,155 {	...	6 45	4 18	1.5 18	32.5 9	...	36.2 9	7.2 4.39	3.0 1.08	15.7 72	22.26 2.9	7.3 27	3 27	2 9	7.5 9	4.3 27	33.5	1 9	317.3 20.62	16.0			
Paungde .	203 {	...	39.4 20.58	...	...	34.5	...	...	...	...	24.6 4.93	24.6 4.93	9.9	...	...	...	...	54.2	...	359.6 39.41	24.6
Prome .	448 {	...	...	8.9 2.23	...	111.6 4.46	...	13.4	...	4.5	2.2	6.7	...	...	...	2.2	...	31.2	...	343.8 15.62	13.4
Thayetmyo, Central.	1,075 {	9	...	...	...	30.7	...	9.3	4.7 5.58	2.8	17.7	14.0	1.9	...	...	...	1.9	8.4	...	196.3 12.09	6.5
Magwe .	245 {	...	...	12.2 4.08	...	12.2 8.16	...	...	...	...	...	...	4.1	...	...	...	...	...	...	93.9 20.4	8.2
Yamothin .	160 {	...	...	...	...	6.2	...	...	...	...	...	6.2	...	...	...	...	6.2	18.8	...	325.6 18.75	31.2
Meiktila .	101 {	...	...	...	9.9	59.4	...	99.0	9.9	...	...	19.8	9	...	...	...	...	19.8	...	514.9 ...	29.7
Pagan .	90 {	...	...	...	...	22.2	...	11.1	33.3	...	11.1	11.1	...	...	...	...	11.1	...	...	122.2 55.56	11.1
Myingyan, Central	1,139 {	...	20.2 16.68	...	...	4.4	...	2.6	26.3 7.02	14.9 2.63	9	29.9 1.76	11.4	...	...	...	1.8	21.1	...	222.1 38.63	17.6
Mandalay, Central.	1,077 {	...	...	...	...	12.1 1.86	...	1.9	4.6 4.64	3.7 93	12.1 3.71	13.9 1.86	6.5	...	...	...	9	3.7	...	129.1 16.71	10.2
Monywa .	98 {	...	...	...	...	...	...	20.4	...	...	...	20.4	...	...	...	...	...	20.4	...	469.4 ...	20.4
Shwebo .	258 {	...	...	7.8	3.9 3.88	27.1	...	62.0	7.8 3.88	...	7.8	31.0	3.9	...	...	...	...	58.1	...	368.2 7.75	11.6
Mogok .	59 {	...	...	...	...	50.8	...	...	...	33.9 16.95	...	33.9	16.9	...	...	...	...	152.5 16.95	16.9	508.5 33.90	16.9
Bhamo .	90 {	...	...	...	...	...	...	...	...	22.2 11.11	33.3	...	...	...	...	...	...	11.1	...	144.4 11.11	22.2
Katha .	85 {	...	...	...	...	23.5	...	11.8	...	...	...	...	...	...	...	...	...	...	...	105.9 ...	*4.7
Kindat .	58 {	...	...	...	...	17.2	...	...	...	...	17.2	17.2	...	...	...	...	...	...	...	344.8 ...	17.2
GROUP II.—BURMA INLAND.	5,185 {	2	6.0 4.82	1.7 39	4 19	25.6 1.16	...	9.8	8.9 4.63	5.8 1.16	8.9 1.16	17.0 1.16	5.6	...	...	2	1.3	18.1	2 1.9	27.7 20.83	13.3	

* Worked on the aggregates.

PRISONERS, 1912.

TABLE XXV—continued.

RATIOS of FAILS, GROUPS, and ADMINISTRATIONS.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE PER 1,000 OF STRENGTH.										Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.		
Cachar . . .	85 {	...	...	...	...	152'9	...	58'8	...	...	...	94'1 11'76	411'8 11'76	...	...	...	11'8	70'6	...	1,105'9 35'29	58'8
Jorhat . . .	96 {	...	...	...	...	114'6	...	...	...	10'4	83'3 31'25	520'8 20'83	72'9	...	...	...	31'3	72'9	...	1,114'6 62'50	41'7
Dibrugarh . .	121 {	...	...	...	...	239'7	...	...	8'3	...	8'3	281'0 8'26	107'4	...	...	...	41'3 8'26	49'6	...	983'5 33'06	41'3
Tezpur . . .	206 {	...	...	...	...	305'8	...	135'9	9'7 4'85	38'8 4'85	34'0	301'0 9'71	169'9 4'85	...	...	...	9'7	38'8	...	1,388'3 24'27	53'4
Nowgong . . .	52 {	...	19'2	...	...	...	...	...	...	57'7 19'23	38'5 19'23	...	...	...	...	...	...	96'2	...	288'5 38'46	19'2
Gauhati . . .	284 {	...	...	3'5	...	31'7	...	17'6	...	7'0	10'6	309'9 28'17	...	...	...	...	24'6	...	...	514'1 42'25	49'3
Dhubri . . .	34 {	...	29'4	...	...	58'8	...	...	...	...	...	205'9	...	...	...	...	...	...	...	352'9	10'7
Sylhet . . .	638 {	...	1'6 1'57	...	...	155'2 3'13	...	...	7'8 3'13	9'4 4'70	37'6 3'13	310'3 15'07	25'1	...	...	65'8	4'7	23'5	...	926'3 42'32	32'9
GROUP III.—ASSAM.	1,516 {	...	2'0 '66	'7	...	149'1 1'32	...	25'1	5'3 1'98	13'2 3'30	29'7 3'96	294'9 15'83	69'9 1'32	...	...	27'7	13'9 '66	31'0	...	903'7 38'92	0'27
Mymensingh . .	563 {	...	...	...	...	133'2	...	...	21'3 7'10	10'7 3'55	10'7	197'2 5'33	156'3	...	...	...	17'8	72'8	...	763'8 30'20	30'2
Dacca, Central	1,140 {	...	...	...	...	270'2 1'75	...	...	14'0 2'63	7'0 '88	33'3	159'6 4'39	46'5	...	...	...	16'7	70'2	...	995'6 15'79	59'6
Tippera . . .	394 {	...	...	...	...	218'3	...	22'8	12'7 2'54	7'6	27'9	205'6 2'54	45'7 5'08	...	...	...	...	50'8	...	784'3 22'84	30'5
Chittagong . .	199 {	...	...	...	...	40'2	...	5'0	5'0 5'03	5'0	40'2	55'3	30'2	...	...	...	5'0	30'2	...	26'6 10'05	20'1
Noakhali . . .	112 {	...	8'9 8'93	...	...	196'4 8'93	...	...	...	...	...	133'9	98'2	...	...	...	17'9	35'7	...	651'8 17'86	26'8
Bakarganj . . .	598 {	...	...	...	...	117'1	...	35'1	10'0 5'02	28'4 10'03	55'2	458'2 21'74	65'2 5'02	...	1'7	...	13'4	18'4	...	1,025'1 44'99	8
Khulna . . .	120 {	...	...	...	...	341'7 8'33	...	...	25'0	16'7	16'7	400'0	500'0	...	...	...	...	41'7	...	1'641'7 8'33	41'7
Jessore . . .	337 {	...	...	...	...	278'9	...	3'0	3'0	5'9 2'97	29'7 2'97	109'8 8'90	323'4 2'97	3'0 2'97	...	...	8'9	53'4	...	70'3 20'77	29'7
Baraset . . .	68 {	...	...	...	...	1,750'0	...	...	44'1	...	58'8	323'5	617'6	...	...	...	...	161'8	...	3,470'0	88'2
Presidency, Central (Europeans).	13 {	...	...	...	...	76'9	...	...	...	...	...	76'9	76'9	...	...	...	76'9	...	...	1,153'8	29'3
Presidency, Central (Indians).	500 {	...	...	...	8'0 2'00	306'0	...	...	22'0 10'00	4'0 2'00	42'0	100'0	164'0	...	...	...	24'0 2'00	86'0	...	982'0 20'00	38'0
Alipore, Central	1,541 {	...	1'9 1'30	1'3	...	227'8 3'89	...	...	11'0 2'60	5'8 '65	41'5 1'95	87'6 1'95	87'6 1'95	...	...	...	9'1 '65	29'9	...	777'4 16'87	31'1
Alipore, new Central (Europeans)	16 {	...	...	...	...	375'0	...	...	...	...	...	125'0	312'5	...	...	...	...	187'5	...	1,812'5	62'5
„ (Indians)	935 {	25'7 1'07	...	...	1'1	289'8 1'07	...	1'1	12'8 2'14	...	54'5 2'14	130'5 1'07	221'4 1'07	...	...	...	4'3 1'07	19'3 1'07	...	1,207'5 14'97	41'0
„ Juvenile	170 {	...	...	...	11'8 5'88	170'6	...	...	5'6 5'88	...	29'4	70'6	35'3	...	...	...	17'6	82'4	...	694'1 11'76	23'5
Howrah . . .	63 {	...	...	...	...	650'8	...	...	...	...	31'7	222'2	158'7	...	...	...	15'9	158'7	...	1,698'4	31'7
Hooghly . . .	228 {	...	...	30'7 13'16	...	153'5	...	206'1	17'5 4'39	...	100'9	118'4 4'39	171'1	...	...	...	26'3	109'6	...	1,188'6 30'70	65'8
Burdwan . . .	154 {	...	...	...	...	454'5	...	6'5	13'0	...	65'0	123'4 6'49	58'5	6'5	...	...	26'0	110'4	...	1,272'7 6'49	45'5
Krishnagar . .	129 {	...	...	...	7'8 7'75	775'2 31'01	...	...	7'8 7'75	...	77'5	62'0 7'75	217'1	...	...	...	46'5	100'8	...	1,658'9 69'77	46'5
Faridpur . . .	312 {	...	...	...	12'8 3'21	211'5 3'21	...	...	16'0 6'41	6'4	80'1 3'21	182'7 9'62	144'2 6'41	...	...	...	44'9 3'21	32'1	...	1,211'5 54'49	67'3
Pabna . . .	165 {	...	...	...	...	139'4	...	...	...	...	54'5	60'6	103'0	...	...	...	...	36'4	...	612'1	42'4
Murshidabad	217 {	...	...	4'6	...	115'2	...	73'7	27'6	...	9'2	216'6	46'1 4'61	...	...	...	50'7	133'6	...	1,161'3 13'82	55'3
Rajshahi, Central.	758 {	...	...	...	...	162'3	...	...	14'5 3'96	11'9 2'64	33'0	116'1	27'7	...	...	...	18'5 2'64	10'6	...	461'7 13'19	19'8
Bogra . . .	150 {	...	...	...	...	186'7	...	...	...	13'3	...	6'8	20'0	...	...	...	13'3	46'7	...	513'3 6'67	20'0
Malda . . .	88 {	...	...	...	...	1,670'4	...	...	...	...	56'8	136'4	102'3	...	...	...	90'9	79'5	...	2,545'5	68'2
Dinajpur . . .	164 {	...	...	...	6'1	189'0 6'10	...	6'1 6'10	...	6'1 6'10	24'4	189'0 6'10	48'8 6'10	...	...	12'2	12'2	48'8	...	878'0 42'68	36'6
Rangpur . . .	208 {	...	...	...	...	274'0	...	...	33'7 9'62	9'6 4'81	19'2 4'81	480'8 9'62	24'0 4'81	...	...	...	...	105'8	...	1,456'7 48'08	62'5

* Worked on the aggregates.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.							2. DEATH RATE PER 1,000 OF STRENGTH.													Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.		
Jalpaiguri .	111 {	...	...	...	27'0	360'4	...	...	...	...	63'1 18'02	675'7	90'1	...	...	...	27'0	72'1 9'01	...	1,675'7 72'07	90'1
Purneah .	219 {	...	4'6 4'57	...	...	105'0	...	...	9'1	18'3 9'13	13'7	82'2	18'3	...	...	...	27'4	45'7	...	429'2 13'70	18'3
Naya Dumka	104 {	...	...	...	...	221'2	...	9'6	19'2	...	28'8	240'4 9'62	28'8	...	...	9'6	...	57'7	9'6	855'8 38'46	19'2
Suri . .	174 {	...	...	...	...	51'7	...	...	...	11'5	46'0	51'7 11'49	80'5	...	...	...	23'0	132'2	...	879'3 17'24	34'5
Bankura .	126 {	...	...	...	...	285'7	...	...	23'8	7'9	31'7	79'4	182'5	...	...	...	...	31'7	...	793'7	47'6
Midnapore, Central.	771 {	...	...	...	1'3 1'30	203'6 1'30	...	...	6'5 2'59	10'4 2'59	42'8 1'30	99'9 1'30	98'6	...	...	...	16'9	123'2	...	930'0 20'75	41'5
Balasore .	135 {	...	...	...	...	548'1	...	...	22'2 7'41	7'4	14'8	96'3 14'81	140'7	...	...	...	74'1 7'41	96'3	...	1,533'3 44'44	51'9
Cuttack .	261 {	...	3'8 3'83	...	...	34'5	...	72'8	7'7	7'7	57'5	84'3	84'3	...	...	...	23'0	49'8	...	616'9 11'49	30'7
Puri . .	118 {	...	118'6 33'90	...	...	169'5	...	...	25'4 8'47	...	33'9	220'3	305'1	...	...	...	76'3 8'47	50'8	...	1,194'9 59'32	50'8
Angul . .	35 {	...	...	...	...	142'9	...	...	...	...	57'1	...	85'7 28'57	...	...	...	57'1	57'1	...	685'7 28'57	28'6
GROUP IV.— BENGAL AND ORISSA.	11,396 {	2'1 '09	1'8 '79	'9 '26	1'5 '44	243'6 1'58	...	10'4 '09	12'6 3'25	7'4 1'76	39'8 1'05	157'2 3'86	112'0 1'40	'2 '09	'1	'6	18'6 '70	62'2 '09	'1	952'4 22'20	42'7	
A																						
Chaibassa .	118 {	...	...	...	...	161'0	...	8'5	25'4	8'5 8'47	25'4	93'2	67'8	...	...	...	...	194'9	...	1,178'0 8'47	42'4
Purulia .	206 {	...	...	...	...	199'0	...	...	19'4 4'85	9'7 4'85	72'8	43'7 4'85	135'9	...	...	...	...	77'7	...	854'4 19'42	24'3
Ranchi . .	154 {	...	...	...	...	194'8	...	...	19'5	6'5 6'49	39'0	19'5 6'49	597'4	...	...	...	26'0	71'4	...	1,292'2 58'44	32'5
Palamau .	71 {	...	...	...	...	211'3	...	...	14'1	...	70'4	408'5	183'1	...	...	...	28'2	169'0	...	1,563'4	42'3
Hazaribagh, Central.	529 {	...	...	...	...	228'7	...	...	5'7 3'78	1'9 1'89	18'9	204'2 13'23	215'5 5'67	...	1'9 1'89	...	18'9 1'89	47'3	...	899'8 34'03	45'4
B																						
Gaya . .	326 {	...	3'1 3'07	...	12'3	297'5	...	15'3	6'1	6'1	55'2	190'2	46'0	...	...	...	42'9	95'1	3'07	1,107'4 9'20	39'9
Bhagalpur, Central.	1,228 {	...	...	...	...	151'5	...	1'6	24'4 10'59	2'4 1'63	25'2	25'2 8'1	186'5 1'63	'8 '81	...	...	4'1	76'5	...	781'8 19'54	34'2
Monghyr .	223 {	...	...	...	...	345'3	...	...	9'0	9'0 4'48	31'4	112'1	121'1	...	...	...	9'0	89'7	...	1,139'0 4'48	35'9
Darbhanga .	203 {	...	...	...	...	192'1 4'93	...	4'9	19'7 4'93	4'9	44'3	103'4	187'2	...	...	...	9'9	44'3	...	798'0 9'85	34'5
Champaran .	181 {	...	...	...	...	486'2	...	...	5'5 5'52	5'5	16'6	171'3	60'8	...	...	...	33'1	22'1	...	989'0 11'05	38'7
Muzaffarpur .	350 {	...	2'9	...	2'9	77'1 2'86	...	...	11'4	2'9	31'4	82'9	8'6	...	...	...	54'3 5'71	51'4	...	594'3 11'43	48'6
Patna . .	265 {	...	...	...	...	101'9	...	...	3'8	...	26'4	41'5 3'77	67'9	...	...	...	3'8	67'9	...	494'3 7'55	15'1
Arrah . .	195 {	...	...	...	...	241'0	...	...	15'4 5'13	10'3	56'4	46'2 5'13	138'5	...	...	...	10'3	133'3	...	892'3 10'26	41'0
Chapra . .	203 {	...	...	...	...	133'0	...	...	4'9	...	49'3	9'9 4'93	54'2	...	...	...	...	69'0	...	443'3 4'93	14'8
Buxar, Central	1,031 {	...	1'9 '97	...	...	110'6	...	...	9'7 2'91	2'9 '97	19'4 '97	122'2 '97	63'0	...	1'0 '97	...	13'6	18'4	...	492'7 12'01	17'5
Korantadih .	69 {	...	...	...	...	43'5	...	...	43'5	14'5 14'49	...	14'5 14'49	...	...	...	...	...	...	...	144'9 28'99	14'5
Ghazipur .	280 {	...	...	...	...	132'1	...	28'6	10'7 7'14	14'3 3'57	21'4	32'1	14'3	...	...	...	3'6	53'6	...	385'7 10'71	14'3
Azamgarh .	171 {	...	...	...	...	64'3	...	...	5'8	23'4	29'2	64'3	40'9 5'85	...	...	...	5'8	76'0	...	532'2 5'85	23'4
Gorakhpur .	427 {	...	...	...	2'3	86'7	...	...	7'0 2'34	...	16'4	96'0 7'03	28'1 2'34	...	...	...	2'3	79'6	...	597'2 14'05	32'8
Basti . .	254 {	...	...	...	...	39'4	...	...	3'9	3'9	7'9	39'4 3'94	11'8	...	...	...	...	185'0	...	519'7 7'87	19'7
Fyzabad .	269 {	...	...	...	...	37'7	...	...	...	...	25'1	37'7	4'2	...	...	...	...	75'3	...	389'1 4'18	20'9
Sultanpur .	173 {	...	...	...	...	5'8	...	...	...	11'6	11'6	5'8	...	...	...	...	5'8	85'0	...	387'3 5'78	17'3
Rae-Bareli .	551 {	...	...	...	...	29'0 1'81	...	...	1'8	5'4 1'81	21'8	36'3 9'07	3'6	...	...	...	3'6	76'2	...	422'9 23'59	29'0

PRISONERS, 1912.

TABLE XXV—continued.

RATIOS of FAILS, GROUPS, and ADMINISTRATIONS.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE PER 1,000 OF STRENGTH.										Average number constantly sick per 100 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncer- tain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.		
Partabgarh .	161 {	...	...	...	...	31'1	...	...	6'2	...	24'8	12'4	12'4	...	...	...	12'4	24'8	...	223'6 6'21	} 6'2
Jaunpur .	191 {	...	...	...	...	199'0	...	...	...	...	20'9 5'24	52'4	36'6	...	...	...	5'2	230'4	...	905'8 5'24	
Benares, Cen- tral.	1,343 {	...	...	...	7	39'5	...	...	4'5 2'23	7 74	9'7 74	22'3 2'98	7'4	...	...	...	7	45'4	...	228'6 10'42	} 20'8
Benares, Dis- trict.	342 {	...	...	...	...	23'4 2'92	...	...	2'9	...	11'7	26'3 2'92	5'8	...	...	...	...	70'2	...	263'2 8'77	
Mirzapur .	201 {	...	...	...	...	129'4	...	...	14'9 4'98	14'9	10'0	14'9	14'9	...	...	...	24'9	204'0	...	751'2 4'98	} 24'9
Allahabad, Cen- tral.	1,407 {	63'3 2'13	...	69'7	12'8 4'98	1'4 71	11'4	21'3 1'42	30'6	1'4	164'2	...	580'0 9'24		} 39'1
Allahabad, Dis- trict.	530 {	...	...	...	...	32'1	...	...	1'9	15'1	13'2	15'1 3'77	5'7	...	...	...	1'9	77'4	...	317'0 15'09	} 24'5
Karwi . .	37 {	81'1	81'1	27'0 27'03	135'1	...	351'4 27'03		} 10'5
Banda . .	182 {	...	...	5'5	...	340'7	...	...	22'0 10'99	54'9 32'97	214'3 5'49	27'5	93'4	...	...	...	...	137'4	...	1,269'2 60'44	} 49'5
Fatehpur .	203 {	118'2	9'9	9'9	19'7	49'3	4'9	133'0	...	541'9 9'85		} 24'6
Hamirpur .	91 {	22'0	...	...	...	131'9	...	...	...	33'0 10'99	120'9	22'0	11'0	...	...	...	...	263'7	...	989'0 32'97	} 33'0
Orai . .	79 {	215'2	12'7 12'66	...	113'9	12'7	164'6	...	721'5 25'32		} 25'3
Cawnpore .	409 {	...	...	...	...	58'7 2'44	...	...	2'4 2'44	...	4'9	19'6 2'44	2'4	...	...	...	...	112'5	...	366'7 12'22	} 17'1
Unao . .	330 {	6'1	12'1	3'0	6'1 3'03	...	9'1	54'5	...	212'1 3'03		} 18'2
Lucknow, Cen- tral.	1,328 {	...	...	...	...	15'1	...	...	1'5 2'26	...	7'5	23'3 75	11'3 2'26	...	...	...	...	19'6 75	...	170'9 9'79	} 9'0
Lucknow, Dis- trict.	517 {	65'8	1'9	11'6	5'8	17'4 1'93	7'7	79'3	...	346'2 3'87		} 13'5
Barabanki .	316 {	...	...	...	...	57'0	...	...	3'2	9'5 3'16	3'2	50'6 3'16	50'6	...	...	...	...	44'3	...	313'3 12'66	} 19'0
Gonda . .	312 {	48'1	...	9'6	19'2 6'41	12'8 3'21	16'0 3'21	22'4 6'41	3'2 3'21	60'9	...	275'6 25'64		} 16'0
Bahraich .	256 {	...	...	...	...	50'8	...	...	3'9	11'7	27'3	23'4	11'7	...	...	...	7'8	85'9	...	628'9 3'91	} 43'0
Kheri . .	296 {	111'5	3'4	...	16'9	6'8	3'4	37'2	158'8	...	682'4 3'38		} 23'6
Sitapur . .	468 {	6'4	...	...	...	42'7	...	4'3	4'3 2'14	21'4 2'14	15'0	32'1	10'7	...	...	...	4'3	130'3	...	525'6 10'68	} 27'8
Hardoi . .	291 {	3'4	48'1	3'4 3'44	20'6	...	34'4 3'44	3'4	75'6	...	457'0 6'87		} 24'1
Etawah . .	264 {	...	...	...	...	37'9	...	...	7'6 3'79	11'4	26'5	45'5 7'58	15'2	...	...	...	15'2	53'0	...	397'7 15'15	} 11'4
Mainpuri .	322 {	217'4	...	59'0	6'2 3'11	24'8	15'5	28'0 6'21	55'9	211'2	...	863'4 9'32		} 34'2
Etah . .	296 {	...	...	3'4	...	3'4	...	16'9	...	6'8 3'38	13'5	3'4	3'4	...	...	...	13'5	114'9	...	317'6 3'38	} 20'3
Fatehgarh, Cen- tral.	1,585 {	1'3	120'5	5'7 2'52	2'5 63	59 1'26	24'0	31'5 63	...	6	...	15'8 63	38'5	...	419'6 6'94		} 32'8
Fatehgarh, Dis- trict.	286 {	...	...	...	3'5 3'50	293'7	...	...	3'5 3'50	31'5	42'0	17'5 3'50	14'0	...	...	...	31'5	42'0	...	664'3 10'49	} 21'0
GROUP V.— GANGETIC PLAIN AND CHUTIA NAGPUR.	19,490 {	4	2 10	1	6 05	101'8 41	...	7'4	7'6 2'72	6'2 1'54	21'7 36	45'3 2'26	49'3 62	1 05	2 10	...	8'3 31	81'4 05	1 05	525'6 12'26		} 26'4
A																						
Shahjahanpur	322 {	...	...	...	...	146'0	...	...	...	3'1	34'2	24'8	12'4	...	...	...	31'1	158'4	...	739'1	} 21'7
Pilibhit .	49 {	40'8	20'4	...	102'0	20'4	20'4	...	387'8		} 20'4
Bareilly, Cen- tral.	1,845 {	5	...	...	...	122'5	...	5'4	30'9 3'79	6'0 54	9'8 54	10'3 1'63	2'7	...	...	...	11'4	98'6	...	455'8 8'13	} 28'2

* Worked on the aggregates.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE PER 1,000 OF STRENGTH.										Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of un- certain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.		
Rareilly, District	596	...	...	...	1'7	78'9	...	...	6'7	33'6	35'2	6'7	1'7	...	5'0	...	6'7	63'8	...	332'2	18'5
		...	...	...	...	...	...	...	1'68	3'36	3'36	3'36	...	...	...	...	...	...	...	13'42	
Bareilly, Juvenile	226	...	...	...	4'4	101'8	...	...	22'1	...	4'4	61'9	13'3	...	...	...	4'4	141'6	...	738'9	33'8
		...	...	...	4'42	...	...	...	...	...	...	...	...	...	...	...	...	4'42	...	8'85	
Budaun	345	...	...	...	...	34'8	...	...	2'9	60'9	14'5	26'1	...	...	...	...	...	95'7	...	423'2	20'3
		...	...	...	...	...	...	...	...	5'80	...	2'90	...	...	...	...	...	...	...	11'59	
Aligarh	303	...	...	...	6'6	26'4	...	...	3'3	...	3'3	6'6	3'3	...	...	...	...	9'9	...	118'8	6'6
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9'90	
Bulandshahr	227	...	...	4'4	4'4	48'5	...	8'8	17'6	8'8	13'2	61'7	13'2	...	...	...	...	66'1	...	409'7	17'6
		...	...	...	...	...	...	...	4'41	...	...	4'41	...	...	...	...	...	...	...	8'81	
Moradabad	310	29'0	...	...	...	6'5	...	...	6'5	12'9	6'5	32'3	19'4	...	...	...	3'2	77'4	...	500'0	22'6
		...	...	...	...	...	...	...	...	...	...	6'45	3'23	...	...	...	...	...	...	22'58	
Bijnor	189	...	...	...	...	68'8	...	10'6	...	5'3	26'5	26'5	...	...	...	...	5'3	74'1	...	365'1	10'6
		...	...	...	...	...	...	...	...	...	...	5'29	...	...	...	...	...	...	...	10'58	
Dehra Dun	80	...	...	...	...	262'5	...	12'5	12'5	12'5	12'5	37'5	37'5	...	...	...	12'5	75'0	...	625'0	25'0
		...	...	...	...	12'50	...	...	...	...	...	...	12'50	...	...	...	...	...	...	25'00	
Saharanpur	260	...	...	...	...	19'2	...	15'4	3'8	11'5	30'8	3'8	7'7	...	...	...	...	15'4	...	226'9	15'4
		...	...	...	...	...	...	...	...	...	3'85	...	...	...	...	...	...	...	...	7'69	
Muzaffarnagar	176	250'0	...	...	...	90'9	...	...	5'7	22'7	22'7	22'7	22'7	...	...	...	34'1	110'2	...	1,272'7	45'5
		...	...	...	...	...	...	...	...	5'68	...	...	...	...	...	...	...	...	...	5'68	
Meerut	587	1'7	...	...	...	54'5	...	...	3'4	51'1	10'2	32'4	13'6	...	...	...	1'7	47'7	...	368'0	13'6
		...	...	...	...	...	...	...	...	5'11	...	...	...	...	...	...	...	...	...	6'81	
Delhi	578	...	...	1'7	...	797'6	...	...	10'55	19'0	31'1	88'2	34'9	...	...	...	64'0	20'8	...	1,344'3	58'8
		...	...	1'73	...	...	...	...	3'46	3'46	...	1'73	1'73	...	...	...	...	...	...	13'84	
Hissar	205	...	...	...	...	...	...	...	...	9'8	29'3	29'3	29'3	...	...	...	19'5	58'5	...	375'6	19'5
			
Ambala	656	...	...	3'0	...	45'7	...	...	10'7	19'8	41'2	112'8	39'6	...	...	...	33'5	67'1	...	506'1	30'6
		...	...	...	...	1'52	...	...	9'15	1'52	...	13'72	3'05	...	...	...	1'52	...	...	32'01	
B																						
Ludhiana	243	...	...	...	...	65'8	...	...	16'5	8'2	20'6	8'2	20'6	...	...	...	4'1	74'1	...	366'3	16'5
			
Jullundur	269	...	...	11'2	...	137'5	...	...	3'7	11'2	7'4	48'3	7'4	...	...	...	11'2	133'8	...	457'2	14'9
		...	...	3'72	...	3'72	...	...	...	...	...	3'72	3'72	...	...	...	...	...	...	14'87	
Ferozepore	381	...	...	10'5	...	81'4	...	94'5	5'2	10'5	5'2	2'6	18'4	2'6	...	...	2'6	84'0	...	440'9	15'7
		...	...	...	...	...	...	...	...	...	...	...	2'62	...	...	...	...	...	...	10'50	
Lahore, Central	1,483	...	...	1'3	7	267'0	...	76'2	13'5	10'1	24'9	20'9	95'1	...	...	...	42'5	156'4	...	942'7	64'7
		...	...	'67	...	...	...	'67	9'44	3'37	'67	2'70	'67	...	...	...	'67	1'35	...	30'34	
Lahore Borstal, Central.	1,111	...	...	'9	...	73'8	...	1'8	8'1	33'3	24'3	14'4	54'9	...	2'7	...	18'0	69'3	...	541'0	22'5
		...	...	'90	...	...	...	...	3'60	7'20	'90	2'70	...	...	...	...	...	...	...	20'70	
„ Female	161	...	...	...	...	24'8	...	...	18'6	6'2	37'3	6'2	49'7	...	31'1	...	87'0	93'2	...	670'8	24'8
		...	...	...	...	...	...	...	6'21	...	...	...	...	...	...	...	...	...	...	6'21	
Gurdaspur	188	...	...	...	...	5'3	...	...	...	10'6	16'0	...	...	...	...	...	5'3	10'6	...	117'0	5'3
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10'64	
Gujranwala	389	...	...	2'6	...	20'6	...	...	2'6	10'3	18'0	10'3	...	...	...	...	2'6	15'4	...	133'7	5'1
		...	...	...	...	...	...	...	...	2'57	...	...	...	...	...	...	...	...	...	7'71	
Sialkot	344	...	...	...	...	145'3	...	...	...	...	32'0	34'9	49'4	...	...	...	2'9	72'7	...	578'5	11'6
		...	...	...	...	...	...	...	...	...	2'91	...	...	...	...	...	...	...	...	8'72	
Jhelum	233	...	...	4'3	...	158'8	...	4'3	12'9	8'6	42'9	64'4	38'6	...	...	...	12'9	137'3	...	699'6	21'5
		...	...	...	...	...	...	...	4'29	4'29	...	...	...	...	...	...	...	...	...	17'17	
Rawalpindi	637	...	...	1'6	...	119'3	...	26'7	23'5	22'0	54'9	40'8	61'2	...	...	...	14'1	127'2	...	678'2	25'1
		...	...	...	...	...	...	...	17'27	6'28	...	...	4'71	...	...	...	...	...	1'57	34'54	
Campbellpore.	177	...	5'6	...	...	45'2	...	...	5'6	...	...	22'6	...	...	...	...	...	56'5	...	293'8	11'3
		...	...	...	...	...	...	...	5'65	...	...	5'65	...	...	...	...	...	...	...	11'30	
GROUP VI.— UPPER SUB-HIMALAYA	12,570	4'5	'1	1'4	'5	135'2	...	15'0	16'4	16'9	22'4	29'7	35'0	'1	'9	...	18'0	87'7	...	565'2	28'2	
		...	...	'32	'08	'24	...	'08	3'90	2'47	'56	2'31	'80	'08	...	...	'16	'24	...	15'43	

PRISONERS, 1912.

TABLE XXV—continued.

RATIOS of FAILS, GROUPS, and ADMINISTRATIONS.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.												2. DEATH RATE PER 1,000 OF STRENGTH.										Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.				
A																								
Peshawar .	694 {	...	...	...	...	634'0	...	...	4'3	10'1	7'2	41'8	21'6	...	...	...	8'6	141'2	...	...	1,050'4	27'4
		...	...	...	...	...	...	...	1'44	...	1'44	2'88	1'44	...	...	...	...	...	...	...	12'97	
Kohat .	139 {	...	...	...	...	151'1	...	7'2	...	7'2	21'6	21'6	...	...	...	...	14'4	...	...	...	316'5	14'4
		...	...	...	...	7'19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7'19	
Bannu .	240 {	...	...	...	...	216'7	...	...	...	8'3	4'2	83'3	108'3	...	...	12'5	...	116'7	...	...	816'7	20'8
		...	...	...	...	...	...	...	...	4'17	4'17	...	...	...	...	...	...	...	...	...	12'50	
Shahpur .	234 {	...	...	4'3	...	175'2	...	8'5	12'8	4'3	21'4	55'6	34'2	...	...	...	...	76'9	...	...	645'3	17'1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8'55	
Mianwali .	188 {	...	...	...	...	5'3	...	16'0	5'3	5'3	31'9	31'9	21'3	...	...	...	10'6	69'1	...	...	319'1	10'6
				
Lyallpur .	317 {	...	...	...	6'3	312'3	...	...	3'2	3'2	22'1	41'0	53'6	...	6'3	...	12'6	72'6	...	...	899'1	18'9
				
Montgomery, Central.	2,105 {	...	...	5'48	...	61'8	...	4'8	20'0	14'7	40'9	61'3	7'6	...	...	...	1'4	77'4	...	...	426'6	22'3
		...	...	...	...	...	...	48	5'23	3'33	...	4'28	48	...	...	...	...	...	...	...	21'85	
Multan, Central.	1,341 {	...	...	...	...	64'9	...	...	23'9	7'5	93'2	17'9	15'7	...	7	...	69'4	177'5	...	...	669'6	27'6
		...	...	...	...	...	...	...	8'20	1'49	75	2'24	...	...	...	...	...	...	...	...	18'64	
Multan, District.	690 {	...	...	2'9	...	52'2	...	...	4'3	58'0	13'0	27'5	20'3	...	...	...	10'1	56'5	...	...	404'3	20'3
		...	...	...	...	...	...	...	...	13'04	...	...	1'45	...	...	...	...	...	...	...	21'74	
Dera Ismail Khan.	428 {	...	...	...	...	81'8	...	102'8	4'7	14'0	7'0	28'0	28'0	...	2'3	...	7'0	135'5	...	...	766'4	18'7
		...	...	...	...	...	...	...	...	...	...	...	2'34	...	...	...	...	...	...	...	7'01	
Dera Ghazi Khan.	80 {	...	...	12'5	...	225'0	...	...	12'5	12'5	125'0	100'0	187'5	...	...	...	...	187'5	...	...	1,200'0	37'5
				
B																								
Sibi .	65 {	...	...	...	...	353'8	...	...	...	...	...	153'8	...	...	...	...	15'4	76'9	...	...	753'8	15'4
		...	...	...	...	15'38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15'38	
C																								
Shikarpur .	202 {	...	...	5'0	...	173'3	...	...	5'0	19'8	14'9	39'6	29'7	...	...	24'8	9'9	19'8	...	...	485'1	24'8
		...	...	...	...	...	...	...	4'95	9'90	...	...	...	...	...	...	...	...	...	...	19'80	
Sukkur .	428 {	...	...	...	...	63'1	...	...	7'0	7'0	...	7'0	2'3	...	...	28'0	2'3	28'0	...	...	200'9	16'4
		...	...	...	...	...	...	...	2'34	...	...	...	...	...	...	2'34	...	...	...	...	93'5	
Sind Gang .	636 {	...	...	6'3	...	138'4	...	...	1'6	18'9	42'5	7'9	25'2	...	...	12'6	1'6	62'9	...	...	474'8	17'3
		...	...	...	...	1'57	...	...	...	6'29	3'14	...	1'57	...	...	...	...	...	...	...	23'58	
Hyderabad, Central.	1,040 {	1'0	...	1'0	...	30'8	...	...	4'8	3'8	28'8	20'2	5'8	...	1'9	1'9	13'5	17'3	...	...	321'2	17'3
		96	...	...	...	...	...	...	4'81	2'88	96	96	...	...	...	...	96	...	...	...	19'23	
Karachi .	392 {	...	...	...	...	45'9	...	...	10'2	...	30'6	10'2	25'5	...	2'6	61'2	38'3	28'1	...	...	431'1	23'0
		...	...	...	...	...	...	...	5'10	...	...	...	...	...	...	2'55	...	...	...	...	10'20	
GROUP VII.— N.-W. FRONTIER, INDUS VALLEY, AND N.-W. RAJPUTANA.	9,219 {	1	...	1'2	3	128'3	...	6'6	11'1	13'5	36'0	35'5	20'3	...	8	5'9	16'5	85'2	...	...	542'6	21'5
		...	...	11	...	33	...	11	3'47	3'04	65	1'63	54	...	...	22	11	...	...	...	16'49	
A																								
Rajkot .	76 {	...	...	...	...	355'3	...	118'4	13'2	...	26'3	118'4	26'3	...	...	...	13'2	78'9	...	...	1,026'3	26'3
		...	...	...	...	...	...	...	...	...	...	13'16	...	...	...	...	...	...	...	...	39'47	
Ahmedabad, Central.	1,146 {	...	14'0	2'6	9	78'5	...	...	3'5	2'6	21'8	28'8	32'3	...	...	...	7'0	82'0	...	...	465'9	25'3
		...	6'11	...	...	87	...	...	1'75	87	87	4'36	2'62	...	...	...	87	...	...	...	24'43	
B																								
Ajmer .	265 {	...	...	...	...	184'9	...	...	3'8	18'9	26'4	3'8	94'3	...	...	...	26'4	135'8	...	...	1,037'7	45'3
		...	...	...	...	...	...	...	3'77	...	...	...	...	...	...	...	...	...	...	...	3'77	
Muttra .	228 {	...	...	...	...	87'7	...	...	...	17'5	8'8	48'2	26'3	...	...	...	...	13'2	...	...	342'1	8'8
		...	...	...	...	...	...	...	...	...	4'39	...	...	...	...	...	...	...	...	...	17'54	
Agra, Central	1,644 {	...	...	4'3	...	63'3	...	...	4'3	4'3	17'0	9'7	7'9	...	...	...	28'0	33'5	...	...	286'5	22'5
		...	...	...	...	1'22	...	...	3'04	1'82	1'22	61	...	...	...	...	...	...	...	...	10'34	
„ District	419 {	...	...	7'2	...	21'5	...	...	...	4'8	19'1	9'5	21'5	...	...	...	2'4	76'4	...	...	377'1	19'1
		...	...	...	...	...	...	...	...	...	2'39	...	...	...	...	...	...	...	...	...	4'77	
Jhansi .	158 {	...	...	...	...	25'3	...	...	25'3	19'0	6'3	50'6	...	...	...	6'3	...	69'6	...	...	341'8	12'7
		...	...	...	...	...	...	...	...	6'33	...	6'33	...	...	...	...	...	...	...	...	18'99	
Lalitpur .	43 {	...	...	...	...	46'5	...	...	...	...	...	23'3	...	...	...	...	...	...	...	...	116'3	5'3
				
GROUP VIII.— S. E. RAJPUTANA, CENTRAL INDIA, AND GUJARAT.	3,979 {	...	4'0	3'3	3	76'7	...	2'3	4'3	6'0	18'3	20'9	23'1	...	...	3	15'8	59'6	...	...	415'4	23'1
		...	1'76	...	...	75	...	...	2'01	1'26	1'26	2'01	75	...	...	...	25	...	...	...	14'58	

* Worked on the aggregates.

PRISONERS, 1912.

TABLE XXV—continued.

RATIOS OF FAILS, GROUPS, and ADMINISTRATIONS.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.							2. DEATH RATE PER 1,000 OF STRENGTH.													Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncer- tain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough and Gangrene.	ALL CAUSES.		
A																						
Damoh . . .	48 {	...	...	...	...	229'2	...	...	20'8	20'8	...	83'3	375'0	...	...	...	...	20'8	...	854'2 20'83	2'08
Saugor . . .	75 {	...	...	...	...	266'7	...	26'7	13'3	...	13'3	93'3 13'33	53'3	...	...	...	...	106'7	13'3	760'0 13'33	26'7
Jubbulpore, Cen- tral	799 {	...	...	...	1'3	15'0	...	5'0	5'0	2'5	3'8	31'3 2'50	6'3	...	1'3	...	...	2'5	...	128'9 8'76	3'8
Narsinghpur . .	66 {	...	...	...	...	15'2	...	...	...	15'2 15'15	45'5 15'15	60'6	15'2	...	...	...	...	75'8	...	318'2 60'61	15'2
Mandla . . .	48 {	...	...	...	...	125'0	...	...	...	...	...	145'8 20'83	125'0	...	...	...	...	229'2	...	1,000'0 41'67	20'8
Bilaspur . . .	66 {	...	...	...	...	60'6	...	60'6	15'2	15'2 15'15	15'2 15'15	621'2 15'15	60'6	...	...	...	...	60'6	...	1,136'4 60'61	45'5
Sambalpur . . .	165 {	...	...	...	...	145'5	...	...	12'1 6'06	36'4 6'06	24'2	163'6	48'5	...	...	...	...	78'8	...	606'1 18'18	18'2
Raipur, Central	343 {	...	...	...	2'9	26'2	...	8'7	5'8 2'92	...	5'8	102'0 5'83	43'7	...	...	...	...	14'6	...	685'1 8'75	17'5
Balaghat . . .	45 {	...	...	...	...	88'9	...	...	...	...	22'2 22'22	...	...	...	...	...	22'2	...	...	133'3 22'22	8'2*
Seoni . . .	35 {	...	...	...	...	28'6	...	...	...	28'6	...	28'6	...	...	...	...	57'1	85'7	...	371'4 ...	28'6
Chhindwara . . .	56 {	...	...	...	...	125'0	...	...	35'7	...	...	...	71'4	...	...	...	17'9	89'3	...	571'4 17'86	17'9
Hoshangabad . .	45 {	...	...	...	...	111'1	...	...	22'2	...	...	200'0	177'8	...	...	...	...	66'7	...	977'8 ...	22'2
Nimar . . .	52 {	...	...	...	...	38'5	...	...	...	...	...	134'6 38'46	...	...	...	...	...	96'2	...	519'2 76'92	19'2
Betul . . .	39 {	...	...	...	...	25'6 25'64	...	...	...	...	51'3	...	25'6	...	...	...	...	76'9	...	205'1 25'64	25'6
Nagpur, Central	880 {	29'5	...	...	...	55'7	...	...	9'1 6'82	6'8 1'14	11'4 2'27	18'2	29'5 5'68	...	...	...	8'0	40'9	...	295'5 19'32	11'4
Bhandara . . .	53 {	...	...	...	...	188'7	...	...	...	75'5 18'87	37'7 18'87	...	18'9	...	...	...	...	113'2	...	528'3 37'74	18'9
Wardha . . .	50 {	...	...	...	...	60'0	...	20'0	...	...	...	120'0	...	...	...	...	...	140'0	...	520'0 60'00	20'0
Chanda . . .	42 {	...	...	...	...	...	...	...	...	...	...	23'8	...	...	...	...	...	23'8	...	142'9 ...	4'7*
B																						
Secunderabad . .	98 {	...	...	...	...	255'1	...	102'0	...	...	20'4	40'8	...	...	...	10'2	10'2	142'9	...	1,173'5 ...	30'6
Yeotmal . . .	75 {	26'7	...	...	...	13'3	...	26'7	13'3	...	...	93'3 13'33	...	...	...	...	...	53'3	...	480'0 13'33	13'3
Amraoti . . .	131 {	...	...	7'6	...	15'3	...	45'8	7'6 7'63	...	7'6	61'1	45'8	...	...	...	15'3	91'6	...	572'5 30'53	38'2
Akola . . .	127 {	...	...	...	...	23'6	...	110'2	...	7	47'2 7'87	78'7 15'75	39'4 7'87	...	...	...	15'7	70'9	...	692'9 47'24	23'6
Buldana . . .	55 {	...	18'2	...	...	72'7	...	18'2	54'5	...	36'4	36'4	145'5	...	...	...	18'2	72'7	...	781'8 ...	18'2
Dhulia . . .	315 {	...	3'2 3'17	...	...	139'7 3'17	...	6'3	6'3	3'2 3'17	9'5	92'1	63'5	...	...	3'2	3'2	50'8	...	711'1 15'87	22'2
Yerrowda, Cen- tral	1,581 {	...	1'3 '63	...	...	29'1	...	79'7	10'8 1'90	1'3 '63	25'3 '63	19'0	86'7	...	...	...	7'6 1'27	65'8	...	630'6 10'75	30'4
Bijapur . . .	355 {	...	...	...	2'8 2'82	115'5	...	132'4	2'8	...	36'6	45'1 5'63	146'5 2'82	...	...	...	...	39'4	...	926'8 11'27	19'7
Deccan Gang . .	989 {	...	19'2 8'09	...	...	25'3	...	21'2	...	20'2 5'06	5'1 1'01	89'0 5'06	7'1 1'01	...	...	...	3'0	55'6	...	374'1 21'23	14'2
Dharwar . . .	381 {	...	...	5'2	2'6	60'4	...	...	2'6 2'62	...	21'0	26'2	10'5	...	...	...	7'9	94'5	...	54'1 2'62	15'7
GROUP IX.— DECCAN.	7,014 {	4'0	3'3 1'43	4	6 '14	54'6 '29	...	34'6	6'8 2'28	6'6 1'71	15'5 1'28	56'2 2'71	48'5 1'14	...	1	3	5'1 '29	55'0	1	510'4 1'6'11	18'8	

* Worked on the aggregates.

PRISONERS, 1912.

TABLE XXV—concluded.

RATIOS of FAILS, GROUPS, and ADMINISTRATIONS.

JAILS AND GROUPS.	Average annual strength.	1. ADMISSION RATE.										2. DEATH RATE PER 1,000 OF STRENGTH.										Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of uncertain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.		
Thana . . .	580 {	...	...	...	6'9	39'7	...	...	6'9	6'9	27'6	51'7	32'8	...	...	...	15'5	34'5	...	350'0	} 20'7
		...	...	...	...	...	...	...	5'17	3'45	1'72	3'45	8'62	...	...	...	1'72	...	...	29'31	
Bombay, Common.	428 {	...	4'7	2'3	...	189'3	...	...	11'7	18'7	32'7	142'5	74'8	...	...	...	2'3	56'1	...	733'6	} 23'4
		...	...	...	...	...	...	...	...	2'34	...	2'34	7'01	...	...	...	...	...	...	16'36	
Bombay, House of Correction.	238 {	...	...	...	...	25'2	...	...	...	4'2	25'2	50'4	58'8	...	...	...	37'8	8'4	...	319'3	} 21'0
		...	...	...	...	...	...	...	...	...	...	4'20	...	...	...	...	...	...	...	21'01	
Ratnagiri . .	114 {	...	...	...	8'8	...	...	26'3	8'8	8'8	78'9	43'9	43'9	...	...	...	...	43'9	...	578'9	} 35'1
		...	...	...	...	...	...	...	...	8'77	...	...	...	...	...	...	...	...	...	8'77	
Karwar . . .	102 {	...	...	...	...	9'8	...	9'8	...	...	39'2	49'0	9'8	...	...	...	...	...	...	205'9	} 9'8
			
Cannanore, Central.	746 {	...	...	...	...	55'0	...	10'7	20'1	1'3	24'1	5'4	...	...	...	...	8'0	63'0	...	410'2	} 17'4
		...	...	...	...	...	...	...	1'34	...	...	...	...	...	...	...	...	...	...	4'02	
GROUP X.—WESTERN COAST.	2,208 {	...	9	5	2'3	68'8	...	5'4	11'3	6'8	30'3	53'0	32'2	...	...	...	11'3	44'4	...	446'6	} 20'4
		...	...	...	...	...	...	...	1'81	1'81	45	1'81	3'62	...	...	...	45	...	...	14'95	
A																						
Bellary, Central	709 {	...	...	...	4'2	135'4	...	5'6	7'1	4'2	22'6	2'8	12'7	...	...	...	...	80'4	1'4	657'3	} 31'0
		...	...	...	...	1'41	...	...	...	1'41	1'41	...	1'41	...	...	...	...	...	...	7'05	
Salem, Central	706 {	...	...	...	2'8	24'1	...	15'6	7'1	8'5	15'6	45'3	...	...	...	...	...	18'4	...	274'8	} 12'7
		...	...	...	...	...	...	...	4'25	...	...	1'42	...	...	...	...	...	...	...	9'92	
Coimbatore, Central.	997 {	...	...	...	...	18'1	...	299'9	2'0	...	6'0	4'0	2'0	...	...	...	1'0	3'0	...	387'2	} 10'0
		...	...	...	...	...	...	...	1'00	...	...	...	...	...	...	...	...	...	...	3'01	
B																						
Palamcottah .	356 {	...	...	...	2'8	73'0	...	...	2'8	2'8	30'9	64'6	2'8	...	...	...	...	59'0	...	589'9	} 33'7
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5'62	
Madura . . .	489 {	...	2'0	...	...	26'6	...	14'3	8'2	2'0	12'3	49'1	2'0	...	...	...	4'1	20'4	...	243'4	} 12'3
		...	...	...	...	...	...	...	...	...	2'04	10'22	...	...	...	...	...	...	...	24'54	
Trichinopoly, Central.	822 {	...	...	...	...	63'3	...	6'1	14'6	...	24'3	41'4	...	...	...	...	6'1	34'1	...	410'0	} 34'1
		...	...	...	...	...	...	...	3'65	...	...	...	...	...	...	...	...	...	...	9'73	
Tanjore . . .	290 {	20'7	...	...	3'4	24'1	...	48'3	...	...	6'9	31'0	31'0	...	...	...	3'4	62'1	...	675'9	} 31'0
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3'45	
Cuddalore . .	283 {	...	...	...	...	49'5	...	70'7	...	...	28'3	91'9	...	...	...	...	...	...	...	441'7	} 17'7
		...	...	...	...	...	...	...	3'53	...	...	...	...	...	...	...	...	...	...	10'60	
Vellore, Central.	1,124 {	...	...	...	1'8	58'7	...	33'8	4'4	3'6	14'2	81'0	91'6	...	...	...	3'6	28'5	...	483'1	} 15'1
		...	...	...	...	89	...	...	4'45	89	89	...	3'56	...	...	...	...	...	...	16'01	
Madras, Civil	36 {	...	...	...	...	27'8	...	...	...	...	...	27'8	...	...	...	...	...	...	...	194'4	} 5'4
			
Madras Penitentiary, Central.	768 {	...	...	...	2'6	15'6	...	50'8	23'4	5'2	37'8	7'8	7'8	...	...	...	9'1	15'6	1'3	506'5	} 14'3
		...	...	...	...	...	...	...	3'91	...	2'60	...	...	...	...	...	...	...	1'30	14'32	
C																						
Rajahmundry, Central .	948 {	...	1'1	...	...	31'6	...	14'8	4'2	1'1	21'1	17'9	...	...	...	...	2'1	5'3	...	227'8	} 17'9
		...	1'05	...	...	...	...	...	2'11	...	...	1'05	...	...	...	...	...	...	...	7'38	
Vizagapatam Central.	588 {	...	28'9	...	...	59'5	...	3'4	6'8	8'5	52'7	54'4	52'7	...	...	...	5'1	18'7	...	493'2	} 28'9
		...	17'01	...	...	...	...	...	1'70	1'70	...	1'70	...	...	...	...	...	...	...	25'51	
Berhampur . .	194 {	...	20'6	...	5'2	87'6	...	...	25'8	...	20'6	51'5	61'9	...	...	...	...	25'8	...	484'5	} 20'6
		...	5'15	...	...	...	...	...	5'15	...	5'15	10'31	...	...	...	...	...	...	...	41'24	
GROUP XI.—SOUTHERN INDIA.	8,310 {	7	2'8	...	1'4	48'6	...	54'5	7'8	3'0	21'7	37'4	20'9	...	...	...	3'0	25'9	2	429'8	} 20 1
		...	1'44	...	...	24	...	...	2'41	36	72	1'20	60	...	...	...	...	...	12	12'03	

* Worked on the aggregates.

JAILS, GROUPS, AND ADMINI- STRATIONS.	Average annual strength.	1. ADMISSION RATE.								2. DEATH RATE PER 1,000 OF STRENGTH.												Average number constantly sick per 1,000 of strength.
		Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Sandfly Fever.	Pyrexia of un- certain origin.	Tubercle of the Lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anæmia and Debility.	Abscess, Ulcer, and Boil.	Phagedæna, Slough, and Gangrene.	ALL CAUSES.		
Aijal . . .	6 {	...	...	...	...	666'7	...	...	...	...	166'7	...	...	...	...	...	...	...	...	833'3	27'5*
Kohima . . .	23 {	...	...	...	...	43'5	...	...	...	...	43'5	43'5	...	...	...	...	...	43'5	...	173'9	4'9*
Shillong . . .	55 {	...	...	...	...	236'4	...	...	...	18'2	36'4	345'5 18'18	90'9	...	...	...	36'4	109'1	...	1,127'3 18'18	36'4
Darjeeling . . .	97 {	...	...	...	...	587'6	...	41'2	10'3	30'9 10'31	185'6	216'5 20'62	402'1	...	...	...	20'6	51'5	...	2,051'6 30'93	51'5
Almora . . .	58 {	...	...	...	...	155'2	...	...	...	17'2 17'24	86'2	69'0	69'0	...	...	...	...	17'2	...	603'4 51'72	17'2
Pauri . . .	10 {	...	...	...	...	100'0	...	...	...	...	...	...	100'0	...	...	...	...	...	...	300'0	6'9*
Naini Tal . . .	45 {	...	...	...	...	355'6	...	...	...	22'2	111'1	266'7	111'1	...	...	...	44'4	200'0	...	1,622'2	44'4
Abbottabad . . .	121 {	...	...	...	16'5	...	...	...	8'3	24'8	8'3	24'8 8'26	8'3	...	...	...	...	90'9	...	388'4 24'79	16'5
Quetta . . .	52 {	...	...	...	...	596'2	...	...	...	38'5	...	76'9	...	...	...	...	...	192'3	...	1,634'6	38'5
Mercara . . .	67 {	...	...	...	14'9	29'9	...	...	...	14'9 14'93	44'8	44'8	29'9 14'93	...	...	...	...	...	...	194'0 29'85	14'9
GROUP XII.— HILLS.	534 {	...	...	...	5'6	250'9	...	7'5	3'7	22'5 5'62	67'4	125'5 7'49	106'7 1'87	...	...	...	11'2	80'5	...	985'0 22'47	28'1
EXTRA INDIA— Aden . . .	51 {	...	...	...	...	...	...	...	...	...	...	39'2	...	...	...	...	...	...	...	39'2	1'1*
INDIA (a) . . .	92,626 {	1'3 '02	1'4 '77	'8 '13	'9 '12	105'2 '52	...	18'6 '04	9'6 3'18	8'0 1'72	24'0 '79	55'4 2'59	41'2 '79	'1 '06	'3 '03	2'1 '03	10'6 '27	61'3 '05	'1 '05	535'6 16'74	25'0	
BURMA . . .	16,339 {	'1 ...	2'3 1'84	'8 '24	1'2 '18	30'4 '43	...	27'8 '06	7'7 4'47	3'7 1'10	13'5 '86	20'6 2'39	6'7 '18	'2 '18	'2 1'6	5'2 '06	3'4 '18	28'6 ...	'1 '12	288'9 20'69	15'1	
ASSAM . . .	1,600 {	...	1'9 '62	'6 ...	...	152'5 1'25	...	23'8	5'0 1'88	13'1 3'13	30'6 3'75	291'9 15'62	69'4 1'25	...	...	26'2	14'4 '62	33'8 ...	...	900'6 37'50	39'4
BENGAL . . .	10,621 {	2'3 '09	'4 '28	'9 '28	1'6 '47	252'1 1'69	...	9'6 '09	12'5 3'30	7'5 1'79	41'6 1'13	160'9 4'05	115'6 1'41	'2 '09	'1 ...	'6 ...	17'0 '56	62'5 '09	...	973'3 21'84	43'7	
BIHAR AND ORISSA.	6,320 {	...	3'2 1'27	...	'8 ...	179'3 '32	...	4'6	13'6 3'96	5'2 1'74	31'5 '16	100'9 2'69	125'6 '95	'2 '16	'3 '32	'2 ...	18'0 '79	63'8 ...	'3 '16	782'3 17'88	31'6	
UNITED PROVINCES . . .	22,327 {	2'9 ...	...	'6 ...	'5 '09	74'2 '40	...	6'9	7'4 2'02	9'7 1'61	17'6 '63	24'6 1'88	15'3 '40	...	'2 ...	'0 ...	7'8 '13	81'7 '09	...	425'7 10'48	23'4
PUNJAB . . .	12,010 {	...	'1 ...	1'7 '42	'2 ...	137'3 '17	...	15'3 '17	17'5 5'16	16'5 3'33	37'0 '33	39'0 2'58	41'1 '83	'1 '08	'9 ...	...	24'1 '17	95'2 '17	...	604'5 19'15	28'6
N.-W. FRONTIER PROVINCE.	1,622 {	...	...	...	1'8 ...	337'9 '62	...	27'7	3'7 '62	11'7 '62	8'0 1'23	41'3 1'85	33'3 1'23	...	'6 ...	1'8 ...	5'5 ...	121'5 ...	...	828'6 11'71	22'2
CENTRAL PROVINCES	3,130 {	8'9 ...	'3 ...	'3 ...	'6 ...	49'5 '32	...	11'8	8'0 3'51	5'4 1'28	10'9 2'24	60'7 3'83	35'8 1'92	...	'3 ...	...	5'1 ...	42'8 ...	'3 ...	406'4 19'81	14'1
BOMBAY . . .	9,053 {	'1 '11	4'4 1'88	1'3 ...	'9 '11	67'0 '33	...	23'2	5'5 1'99	7'0 2'32	24'0 '77	41'0 1'99	40'8 1'55	...	'3 ...	5'7 '22	8'8 '55	50'9 ...	...	483'4 17'23	21'5
MADRAS . . .	9,056 {	'7 ...	2'5 1'33	...	1'3 ...	49'1 '22	...	50'9	8'8 2'32	2'9 '33	21'9 '66	34'8 1'10	19'2 '55	...	...	...	3'4 ...	28'9 ...	'2 '11	428'2 11'37	19'9
ANDAMANS . . .	11,280 {	...	...	...	...	993'7 2'57	...	6'1 '44	8'1 5'23	17'8 6'21	74'2 1'60	99'1 6'03	45'9 '44	'3 '18	...	2'4 '09	'4 '09	56'6 ...	'4 '09	1,624'25 31'6	75'4
INDIA (b) . . .	103,906 {	1'2 '02	1'3 '68	'7 '12	'8 '11	201'6 '74	...	17'3 '09	9'5 3'41	9'1 2'20	29'4 '88	60'2 2'96	41'7 '75	'1 '08	'2 '03	2'1 '04	9'5 '25	60'8 '05	'1 '06	653'8 18'36	30'5	

* Worked on the aggregates.
(a) Excluding Andamans.
(b) Including Andamans.

PRISONERS, 1912.

TABLE XXVI.

ABSTRACT of the SANITARY SHEETS of the most UNHEALTHY JAILS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

BENGAL.

Dacca, Central. The accommodation was insufficient in some particular wards for some time during the year. The outside drainage is very unsatisfactory: the filtered water-supply was insufficient for the most part of the year. The jail site is good, but is surrounded by habitations containing filthy drains, pools and wells. The number of malaria fever cases was higher than for the past ten years, probably due to an increase in the rainfall, the unsatisfactory drainage outside the jail, and partly to overcrowding.

Barisal. The sleeping barracks on the ground floor and the cells are damp. The site is low and damp and the surroundings are insanitary due to being peopled by the public on all sides. The main defect is a tidal *khal* which runs round three sides of the jail and acts as a sewer for practically the whole town.

Presidency, Central. The accommodation is not satisfactory, and the under-trial wards were occasionally overcrowded. The jail is soon to be demolished.

Alipore, New Central. There were no special local causes of disease. The site of the jail is fair and the buildings excellent.

Hooghly. There are no defects in the sanitation of the jail. A special cell in the hospital compound for the isolation of infectious cases would be a great improvement. The Inspector-General remarks:—"Not so good as usual."

Faridpur. Almost all the wards were more or less overcrowded, and a large number of healthy prisoners were transferred to relieve overcrowding, leaving in the jail those in indifferent and bad health and the aged. A large percentage of the admissions were in indifferent health and of advanced age. The levels of the drains require adjusting. The Inspector-General remarks:—"Bad. Many improvements in hand and needed."

Berhampore. No defects which were local causes of disease.

Rangpur. The accommodation is limited, and there was overcrowding during part of the year. A project for the better drainage of the jail site is in hand. The surroundings are damp and marshy during the rains and part of the cold season. The year was a particularly wet one, and more than once the jail site inside was more or less flooded.

Midnapore, Central. No defects except that the under-trial ward is not sufficient for requirements.

ASSAM.

Tezpur. The ventilation in the solitary cells is defective. The drainage and conservancy arrangements are not as good as they might be and the surroundings are insanitary; the water-supply is also defective. The Inspector-General remarks:—"The defects in the cells have since been removed. The scheme for improving certain drains has been financed this year. A new hospital is under construction and the drains round it will be improved. Action is also being taken to improve the water-supply by providing boilers and to remove the insanitary conditions of the surroundings of the jail."

Gauhati. The surroundings are most insanitary owing to the proximity of the bazar. A scheme for the reconstruction of the drains, which are defective, is now in hand and minor improvements have already been carried out. The jail site is low-lying and unsatisfactory.

Sylhet. The cells are dark and damp, while the hospital is also dark and the ventilation deficient. Proposals for the improvement of these defects and also of the bathing arrangements are under consideration. The drainage is defective owing to the low level of the jail site.

BIHAR AND ORISSA.

Hazaribagh, Central. The ventilation in some of the wards is somewhat deficient; steps are being taken to remedy this. Additional drainage is required. The water-supply is defective, but an improvement scheme has been taken in hand. The most prevalent diseases were dysentery, diarrhoea, and malaria.

Gaya. The hospital compound is confined owing to the space being taken up by water tanks, boilers and trees. The water-supply is not above suspicion and liable to contamination, as the system is a very complicated one. The Inspector-General remarks:—"The situation is good. The area inside is insufficient and the water-supply inadequate. The jail is soon to be enlarged and the water-supply improved."

Monghyr. There were no local causes of disease.

Muzaffarpur. Almost all the wards have *kutcha* berths, and the ventilation is not very good. There was slight overcrowding in the under-trial, segregation and civil wards. Local causes of disease can be found in the numerous tanks and ponds in the town, many of which are in a filthy condition. The Inspector-General remarks:—"Site faulty, buildings old generally."

UNITED PROVINCES.

Allahabad, Central. No defects.

Bahraich. An old jail; the site plan bad, but the buildings have all been re-built of late years.

Bareilly, Juvenile. No defects.

PUNJAB.

Delhi. The accommodation in the hospital is insufficient for segregation of patients when necessary. The drains require repairs and levelling and this has been taken in hand. There is a marked and progressive increase in the number of cases of tubercle and dysentery. As to tubercle it is said this may be due to (1) a relative increase on account of closer supervision and earlier and improved diagnosis, and (2) an actual increase in the number of cases contracted within the jail. No cause can be assigned for the increase in dysentery. A great deal of the sickness is due to the prisoners coming from particularly unhealthy surroundings and to a large number being in indifferent and bad health on admission. The provision of a tubercle ward is under consideration, and the ventilation of the sleeping barracks is being remodelled.

Ambala. The majority of the barracks are insufficiently ventilated. In the hospital wire gauze spring doors and wire gauze over window ventilators are required. Dysentery and diarrhoea are responsible for a great deal of the sickness and mortality. The shortage of water is a very serious defect and so far there appears no way to remedy it.

Lahore, Central. The jail population exceeded the arbitrary standard of 1,500: the danger which attends such excess was realized but was unavoidable. The chief cause of mortality was tuberculosis.

TABLE XXVI—*continued*.

ABSTRACT of the SANITARY SHEETS of the most UNHEALTHY JAILS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.—continued.

BURMA.

Rangoon, Central. There was overcrowding in the jail from June to December. The old workshops with earthen floors are considered to be insanitary, especially in view of the prevalence of tuberculosis in the jail. The ventilation is defective in the solitary and condemned cells and the hospital observation cells. There was an outbreak of scurvy during the rains, the cause of which remains undecided. The Inspector-General remarks that the completion of the water-supply scheme and improvement of the ventilation of observation cells are still pending for want of funds.

Akyab. No particular cause can be assigned for the sickness and mortality except that the percentage of prisoners admitted in a "bad" state of health during the year was double that of the previous year. Improvements to the water-supply are in progress. The jail site is fairly high and well drained and the conservancy arrangements are good. All drinking water is boiled.

RAJPUTANA.

Ajmer. No sanitary defects. The diseases responsible for most admissions were malaria, diarrhœa, abscess and ulcers and venereal diseases.

PRISONERS, 1912.

TABLE XXVII.

ENTERIC FEVER by months, Jails, Groups, and Administrations.

TABLE XXVIII.

MALARIA by months, Jails, Groups, and Administrations.

TABLE XXIX.

PYREXIA of UNCERTAIN ORIGIN by months, Jails, Groups, and Administrations.

JAILS* AND GROUPS.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.														
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Mergui	2	...	...	...	...	...	...	1	...	2	1	1	1	8	...	...	...	...	...	...	...	1	...	1	...	1	3
Tavoy	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Moulmein	1	...	...	...	2	...	...	...	1	...	...	...	4	1	1	...	3	4	6	6	2	2	4	3	1	33	1	...	...	1	15	8	3	...	...	...	1	29	
Shwegyin	2	...	...	...	1	2	4	...	1	2	2	14	...	...	2	...	1	...	1	...	...	...	...	5	
Toungoo	
Rangoon, Central } (Europeans) }	1	...	...	1	2	...	...	1	...	...	...	...	3	...	1	...	...	5
„ (Indians) }	15	15	13	14	15	12	20	14	7	13	10	17	165	13	11	18	14	13	25	24	33	18	13	25	27	234
Maubin	2
Myaungmya, Central	4	1	...	1	2	...	1	2	1	...	...	6	...	...	...	...	...	...	...	4	2	1	...	...	7	
Bassein	2	...	...	...	...	...	...	...	...	...	...	...	7	4	1	6	3	1	4	4	3	3	2	3	5	39	...	...	...	1	2	2	5	4	2	12	...	3	31
Insein	1	...	...	...	1	...	...	...	...	...	...	...	2	1	2	...	1	3	...	...	1	2	1	...	13	2	6	10	6	5	2	8	6	4	3	7	12	71	
Henzada	1	...	1	2	...	...	...	...	4	...	...	...	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	2	3	2	...	...	...	8
Sandoway	1	1	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyaukpyu	4	2	2	5	2	4	7	3	3	2	3	5	42	...	...	...	...	1	...	...	...	...	...	...	...	...
Akyab	3	2	2	1	2	1	1	...	...	2	2	...	16	...	...	...	...	...	...	...	...	1	4	2	...	8
GROUP I.— BURMA COAST AND BAY ISLANDS }	4	...	...	...	4	...	2	2	1	...	4	...	17	35	27	23	28	29	28	42	28	22	29	31	41	363	17	18	31	22	37	37	43	54	30	32	37	46	404
Paungde	3	1	3	7	...	...	...	...	...	...	...	...	...	...	...	...	...
Prome	2	3	2	...	4	6	4	4	4	6	3	12	50	2	2	1	...	...	...	...	...	1	...	...	...	6
Thayetmyo, Central	1	1	2	...	4	6	2	1	4	6	6	33	...	...	2	1	1	2	...	...	...	1	2	10	
Magwe	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Yamethin	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Meiktila	1	1	1	3	...	...	...	6	1	...	1	1	...	...	4	3	...	...	...	...	10
Pagan	1	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Myingyan, Central.	2	...	1	...	...	...	...	...	...	...	1	5	...	...	...	...	...	...	...	...	...	2	...	...	3
Mandalay	2	2	1	3	3	1	1	13	...	...	...	...	...	1	...	...	1	...	...	...	2
Monywa
Shwebo	1	...	...	...	...	...	...	...	1	...	...	...	1	2	1	1	1	...	1	...	...	7	1	1	1	...	4	3	...	...	5	...	1	...	16
Mogok	1	...	...	...	2	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Katha	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Kindat	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
GROUP II.— BURMA INLAND }	1	...	...	...	...	...	1	...	...	...	2	2	7	3	6	8	16	15	12	11	18	12	23	133	5	4	6	4	1	7	7	4	1	6	3	3	51
Cachar	3	...	1	1	...	3	1	1	2	1	...	...	13	2	...	3	...	...	...	...	...	...	...	...	...	5
Jorhat	1	...	2	...	1	...	5	...	1	1	11	...	...	...	...	...	...	...	...	...	...	...	...	...
Dibrugarh	1	1	3	9	3	...	3	5	3	...	1	...	29	...	...	...	...	...	...	...	...	...	...	...	...	...
Tezpur																														

JAILS AND GROUPS.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.																	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.			
A																																										
Chaibassa	
Purulia		
Ranchi		
Palamau		
Hazaribagh, Central		
B																																										
Gaya	2	2	4	6	1	4	3	5	6	5	18	12	12	19	6	97	
Bhagalpur, Central	12	11	7	15	13	13	16	27	38	27	2	5	186
Monghyr	3	3	1	...	4	6	2	11	15	14	12	6	77	
Darbhanga	3	4	5	1	5	3	2	5	3	4	3	1	39	
Champarun	1	3	1	7	4	7	11	9	14	16	6	9	88	
Muzaffarpur	3	2	3	1	7	3	2	4	1	1	27		
Patna		
Arrah	3	3	2	1	1	2	3	10	13	3	3	3	47	
Chapra		
Buxar, Central	8	3	6	7	8	6	21	15	12	24	3	1	114	
Korantadih		
Ghazipur	1	1	1	1	2	...	8	12	9	2	37		
Azamgarh		
Gorakhpur		
Basti		
Fyzabad	1	2	...	2	...	2	1	1	9		
Sultanpur		
Rae-Bareilly	2	2	5	1	3	3		
Partabgarh		
Jaunpur	3	...	2	4	4	...	6	4	10	1	1	3	38		
Benares, Central	4	1	4	22	6	5	2	3	1	4	...	1	53	
„ District		
Mirzapur	2	...	1	4	2	...	5	1	3	2	6	...	26		
Allahabad, Central	3	3	6	11	8	4	9	9	9	17	6	4	89	7	12	11	1	15	32	9	4	6	1	98		
„ District		
Karwi				

PRISONERS, 1912.

TABLE XXVII—*concl'd.*

TABLE XXVIII—*concl'd.*

TABLE XXIX—*concl'd.*

*ENTERIC FEVER by months, Fails,
Groups, and Administrations.*

MALARIA by months, Fails, Groups, and Administrations.

*PYREXIA of UNCERTAIN ORIGIN by
months, Fails, Groups, and Administrations.*

[illegible]

JAILS, GROUPS, AND ADMINISTRATIONS.	ADMISSIONS FROM ENTERIC FEVER IN EACH MONTH.												ADMISSIONS FROM MALARIA IN EACH MONTH.												ADMISSIONS FROM PYREXIA OF UNCERTAIN ORIGIN IN EACH MONTH.																
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.		
A																																									
Bellary, Central	1	2	3	12	13	8	7	8	7	10	6	8	6	8	3	96	4	4	
Salem	...	...	...	...	...	1	...	...	...	...	...	2	4	1	...	2	...	4	1	2	1	1	...	1	17	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Coimbatore, Central	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	1	...	10	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B																																									
Palamcottah	1	1	3	4	2	...	4	4	1	3	4	1	26	
Madura	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	3	...	1	...	1	3	1	1	13	...	1	2	...	1	...	...	1	...	...	1	1	7	...	
Trichinopoly, Central	...	...	...	...	...	...	...	...	...	...	...	...	8	8	5	4	5	2	2	5	2	7	3	1	52	...	...	...	...	...	...	...	...	...	...	...	5	5	...	
Tanjore	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	1	1	...	1	...	1	1	1	7	...	...	...	...	...	...	...	...	...	...	3	2	14	...	
Cuddalore	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	1	3	...	...	1	5	...	...	...	14	...	2	...	2	3	2	2	3	...	...	2	4	20	...	
Vellore, Central	2	...	...	...	...	...	...	...	...	...	...	2	10	5	1	4	3	1	6	7	6	14	4	5	66	...	6	...	4	1	2	...	7	3	9	6	38	...		
Madras, Civil	1	1	
Madras Penitentiary, Central	...	...	...	1	...	...	...	...	1	...	2	...	...	...	1	3	2	...	1	...	1	3	...	1	12	3	3	1	...	4	...	...	18	1	2	2	5	39	...	
C																																									
Rajahmundry, Central	...	...	...	...	...	...	...	...	...	...	...	...	7	...	3	2	4	1	3	3	4	1	2	...	30	...	...	...	...	2	6	4	2	...	...	...	...	14	...	
Vizagapatam, Central	...	...	...	...	...	...	...	...	...	...	...	...	2	5	2	1	1	2	6	3	5	4	1	3	35	1	...	...	...	...	...	...	...	...	...	...	1	2	...	
Berhampur	1	1	1	1	...	2	2	...	1	1	4	1	3	1	17	
GROUP XI.— SOUTHERN INDIA	2	...	1	...	1	2	2	...	...	2	2	12	50	38	22	31	35	19	36	42	40	44	27	20	404	5	12	3	1	15	9	18	31	91	119	87	62	453	...	
Aijal	1	...	1	1	...	1	4	
Kohima	1	1	
Shillong	2	4	1	3	1	2	13	
Darjeeling	2	5	5	4	6	6	8	5	4	7	4	1	57	1	...	3	4	...	
Almora	1	1	4	3	...	9	
Pauri	1	1	
Naini Tal	2	2	...	1	1	3	3	1	1	1	...	1	16	
Abbottabad	
Quetta	1	1	...	5	7	5	4	3	1	3	1	31	
Mercara	1	1	2	
GROUP XII.— HILLS.	1	1	1	...	3	5	11	12	7	12	17	20	11	9	14	10	6	13†	1	...	3	4	...
INDIA*	6	3	4	7	11	3	8	11	12	3	8	5	81	589	567	591	616	649	596	927	1,052	1,098	1,240	1,051	767	9,743	54	64	86	60	119	148	150	162	238	243	227	180	1,725	...	
BURMA	4	...	1	4	...	2	2	2	...	4	...	19	37	34	26	34	37	44	57	40	33	47	43	64	496	22	22	37	26	38	44	50	58	31	38	40	49	455	...		
ASSAM	...	...	...	...	...	...	...	...	...	...	...	...	11	14	22	19	19	23	29	27	26	18	23	13	244	2	...	3	...	1	...	4	6	16	4	...	2	38	...	
BENGAL	...	1	...	5	1	1	3	2	4	...	...	17	161	165	165	149	129	159	292	304	310	337	284	324	2,679	...	...	2	2	13	4	11	8	23	10	17	12	102	...	
BIHAR AND ORISSA	...	...	...	...	...	...	2	2	...	...	1	5	65	65	61	59	67	83	119	172	166	146	79	51	1,133	...	1	...	1	...	1	...	4	13	7	1	1	29	...	
UNITED PROVINCES	...	1	3	...	1	...	...	1	2	1	2	11	117	104	128	177	152	107	170	186	167	153	122	74	1,657	9	13	11	8	24	43	14	8	13	7	3	1	154	...	
PUNJAB	...	...	...	3	...	...	...	...	...	...	3	59	57	90	72	95	55	95	129	206	300	284	207	7,649	5	12	13	16	10	23	25	19	18	18	10	9	184	...		
N.-W. F. PROVINCE	...	1	...	...	...	...	1	1	...	...	3	16	10	15	28	49	34	54	60	36	96	83	67	548	...	...	...	1	...	20	4	5	5	4	3	3	45	...		
CENTRAL PROVINCES	...	...	1	...	...	...	1	...	...	...	2	11	4	15	8	12	9	13	19	38	12	7	7	155	2	2	1	2	2	3	3	4	4	1	7	6	37	...		
BOMBAY	...	...	...	1	...	1	3	2	...	1	8	55	63	37	33	47	42	39	58	61	63	75	34	607	6	2	7	2	9	1	19	18	19	35	59	33	210	...		
MADRAS	2	...	1	...	1	2	2	...	...	2	12	53	42	25	31	35	27	45	46	43	47	30	21	445	7	12	4	2	15	10	19	31	9	119	87	64	461	...		
ANDAMANS	...	...	...	...	...	...	...	...	...	...	...	984	903	1,273	947	876	1,211	1,673	1,083	744	644	439	427	11,209	2	7	23	8	2	3	5	...	3	4	9	3	69	...		
INDIA†	6	3	4	7	11	3	8	11	12	3	8	5	81	1,573	1,470	1,864	1,563	1,525	1,807	2,600	2,140	1,842	1,884	1,490	1,194	10,952	56	71	103	68	121	151	155	162	241	247	236	183	1,794	...	

* Including Sibi, Quetta, Ajmer, Secunderabad and Mercara and excluding Andamans.
† Including Sibi, Quetta, Ajmer, Secunderabad, Mercara and Andamans.

TABLE XXX.

*CHOLERA by months, Fails, Groups,
and Administrations.*

TABLE XXXI.

*DYSENTERY by months, Jails, Groups,
and Administrations.*

TABLE XXXII.

*DIARRHŒA by months, Fails, Groups,
and Administrations.*

[illegible]

* Jails where neither Cholera, Dysentery nor Diarrhoea occurred are not shown in these tables. For the annual ratios see Table XXV.

[illegible]

PRISONERS, 1912.

TABLE XXX—*concl'd.*

*CHOLERA by months, Years, Groups,
and Administrations.*

TABLE XXXI—*concl'd.*

*DYSENTERY by months, Fails, Groups,
and Administrations.*

TABLE XXXII—*concl'd.*

*DIARRHŒA by months, Fails, Groups,
and Administrations.*

JAILS AND GROUPS.	ADMISSIONS FROM CHOLERA IN EACH MONTH.												ADMISSIONS FROM DYSENTERY IN EACH MONTH.												ADMISSIONS FROM DIARRHŒA IN EACH MONTH.																
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.		
A																																									
Peshawar																2		1	4	2	4	1	4	8	3	29			2		2	1		1	2	4	1	1	1	15	
Kohat																										3													3		
Bannu														1	1		3	3	3	1	2	1	3		2	20	3	2	2		3	2	4		4	2		3	1	26	
Shahpur																1				1		1	1	6	3	13		1				2			2	2	1			8	
Mianwali																1	2			1	1					6	1				2				1						
Lyallpur																			2	3	1	3	1	2		13	1	1			3	2			5	2	1		1		17
Montgomery, Central														7	2	7	13	31	11	10	8	17	15	5	3	129					1	4	7		3		1				16
Multan, Central														1	1		1	1	1	2	6	4	1	5	1	24		1	1	1	1	1		4	4	2	3	3	21		
„ District														3	2	2	5		2	2	1		1	1		19		1	4	3	2	1		1	1	1			14		
Dera Ismail Khan																1	4	2	1	1			1	2		12		1		1	1		1	2	5		1		12		
Dera Ghazi Khan																1	1			1		2	1		2	8	1	1	1	1		1	1	2	2	1		4	15		
B																																									
Sibi														2	4	1	2								1	10															
C																																									
Shikarpur																1	1	2		1			1	2		8								2	1		1	2	6		
Sukkur															1	1					1				3									1					1		
Sind Gang														1		1			2	1					5	3	1	2		1	4	2	2				1	16			
Hyderabad, Central														1		1	2	2	1	3	5	1	3		21	1						2		1	1	1			6		
Karachi																	2	1		1					4		3	2	2	1		1					1	10			
GROUP VII.—																																									
N.-W. FRONTIER, INDUS VALLEY, AND N.-W. RAJ-PUTANA														16	11	21	36	43	28	28	27	34	30	37	16	327	10	14	12	19	17	18	16	25	23	9	10	14	187		
A																																									
Rajkot														1			1			1	1	2		2	1	9						1	1						2		
Ahmedabad, Central															1				1	5	9	3	4	6	4	33	1		1		1		5	24	2	2	1		37		
B																																									
Ajmer																					1				1	3	3	1	1			3	3	4	4	2	1	25			
Muttra																1	1	1		1	1	4	1		11			1		1				2	2		1	6			
Agra, Central																		1		1	6	2	2	3	1	16						1		8	3		1	13			
„ District															1						3				4				1					3	1		2	2	9		
Jhansi															1	1	1	1			2		2		8																
Lalitpur																					1				1																
GROUP VIII.—																																									
S.-E. RAJPUTANA, CENTRAL INDIA AND GUJARAT																																									
														1	3	2	3	3	1	8	23	12	9	11	7	83	4	3	3	2	2	2	9	38	12	8	6	3	92		
A																																									
Damoh																	1	1					1	1		4								7	5	3	1		2	18	
Saugor																			1		2	1	1	1		7						1		1				4			
Jubbulpore, Central															2	3	2	2	2	2	9		3			25	1			1	2	1							5		
Narsinghpur																					2	2				4												1			
Mandla																2					1	1	2	1		7		1										1			
Bilaspur																1																						6			
Sambalpur															1	1	3		2	1	2	4	4	2	3	27	1			2	3	1		1					4		
Raipur, Central																1			5	1	9	11	3	4	1	35		1	2				2	8	2				15		
Seoni																						1				1															
Chhindwara																																									
Hoshangabad																				1	1	1	3	1	2	9							1	6		1			8		
Nimar															1							4	2			7															
Betul																																									
Nagpur, Central																																									
Bhandara																																									
Wardha																																									
Chanda																																									
B																																									
Secunderabad																																									
Yeotmal																																									
Amraoti																																									
Akola																																									
Buldana																																									
Dhulia																																									
Yerrowda, Central																																									
Bijapur																																									
Deccan Gang																																									
Dharwar																																									
GROUP IX.—																																									
DECCAN																																									

[illegible]

TABLE XXXIII.

DETAIL of DISEASES.

DISEASES.	EUROPEAN ARMY OF INDIA.												INDIAN ARMY.*						JAIL POPULATION OF INDIA 103,906.
	BRITISH OFFICERS ATTACHED TO EUROPEAN TROOPS 2,278.			MEN 71,001.				WOMEN 4,147.		CHILDREN 7,046.		BRITISH OFFICERS ATTACHED TO INDIAN TROOPS 1,868.			PRESENT ENROLL- ED. { 131,644 148,200				
	Admissions.	Deaths.	Invalids.	Admissions.	Constantly sick.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.†	Admissions.	Deaths.	Invalids.	Admissions.		Deaths.
GENERAL DISEASES.																			
INFECTIVE DISEASES :—																			
Anthrax . . . . .	...	...	...	1	'20	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Blackwater fever . . . . .	...	...	...	1	'01	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Beri-beri . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19	...	1	13	1
Cerebrospinal fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2	...	13	9
Chicken-pox	3	...	...	12	'58	...	...	3	...	107	...	1	...	...	152	...	...	331	...
Cholera	1	...	...	19	'90	10	...	3	3	2	1	...	...	...	85	38	...	130	71
Cow-pox . . . . .	...	...	...	2	'14	...	...	1	...	1	...	...	...	...	14	...	...	6	...
Dengue	16	...	...	364	8'73	...	...	26	...	54	...	17	...	...	398	...	...	161	1
Diphtheria	5	...	...	15	1'30	3	...	2	1	21	12	1	...	...	...	...	...	...	...
Dysentery	22	...	2	371	26'14	11	9	24	1	22	5	24	...	...	2,157	12	5	6,250	308
Endocarditis, infective . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Enteric fever	13	1	2	118	20'88	26	1	28	5	13	...	12	1	...	243	62	1	81	1
Enteritis, infective	1	...	...	1	'03	1	...	...	...	3	1	...	...	...	19	1	...	44	8
Erysipelas . . . . .	...	...	...	10	'85	...	...	1	...	1	...	...	...	...	5	...	...	77	9
Gangrene, acute infective . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	3	3
German measles . . . . .	...	...	...	9	'33	...	...	...	...	3	...	3	...	...	4	...	...	4	...
Gonorrhœa	3	...	...	2,416	329'60	1	2	1	...	4	...	...	...	...	793	1	8	423	...
Influenza	45	...	1	317	9'03	...	...	9	...	14	...	19	...	...	449	...	...	124	2
Kala-Azar . . . . .	...	...	...	5	1'23	...	3	...	...	...	...	...	...	...	8	8	1	5	2
Leprosy . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	1	7	93	10
Madura disease . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...
Malaria	108	...	...	5,847	210'12	12	3	93	1	190	5	105	...	...	11,712	35	8	20,952	77
Mediterranean fever . . . . .	...	...	...	1	'27	...	...	...	...	...	...	...	...	...	65	3	...	1	...
Measles	3	...	...	16	'80	...	...	4	...	135	...	4	...	...	187	1	...	63	...
Mumps	3	...	...	12	'73	...	...	...	...	14	...	...	...	...	659	...	...	531	...
Osteo-myelitis and Periostitis, acute infective . . . . .	...	...	...	...	'53	1	...	...	...	1	1	...	...	...	1	...	...	...	...
Paratyphoid A	2	...	1	60	8'45	2	5	1	...	1	...	...	...	...	...	...	...	...	...
„ B . . . . .	...	...	...	4	'49	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague	1	...	1	10	1'04	5	...	...	...	...	...	...	...	...	28	18	...	12	8
Pneumonia	7	...	...	155	18'28	20	...	2	1	13	2	4	1	...	874	110	...	943	229
Pyæmia . . . . .	...	...	...	1	'04	1	...	...	...	1	1	...	...	...	7	3	...	5	3
Pyrexia of uncertain origin	93	...	...	1,506	60'24	3	...	43	...	59	...	64	...	...	5,820	15	...	1,794	9
Rabies . . . . .	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Relapsing fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	...	...	...	...
Rheumatic fever	6	...	...	351	28'59	...	14	12	...	6	...	6	...	...	712	...	11	621	5
Sandfly fever	89	...	...	2,163	41'44	...	...	19	...	12	...	13	...	...	1,316	...	...	...	...
Scarlet fever	2	...	...	1	'13	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Septicæmia	2	...	1	7	'20	6	...	2	2	1	...	...	...	...	6	3	...	14	14
Small-pox	5	...	...	17	1'56	3	...	18	1	15	1	4	1	...	64	3	1	71	12
Syphilis	2	...	...	824	104'90	2	9	4	...	...	...	1	...	...	510	6	16	1,327	18
Tetanus . . . . .	...	...	...	4	'32	2	...	...	...	...	...	...	...	...	2	1	...	7	2

* Details of the Indian Army include troops out of India and exclude those on Field Service.
† Information not available

DISEASES.	EUROPEAN ARMY OF INDIA.											INDIAN ARMY.						JAIL POPULATION OF INDIA.	
	BRITISH OFFICERS ATTACHED TO EUROPEAN TROOPS.			MEN.			WOMEN.		CHILDREN.		BRITISH OFFICERS ATTACHED TO INDIAN TROOPS.			MEN.					
	Admissions.	Deaths.	Invalids.	Admissions.	Constantly sick.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.
INFECTIVE DISEASES— <i>contd.</i>																			
Tubercle of the lungs	2	1	2	87	29'82	11	47	8	3	...	...	2	...	...	262	32	127	982	354
Other tubercular diseases . . .	1	...	1	25	5'12	3	14	1	1	10	7	1	...	...	88	6	44	135	36
Whooping-cough	1	...	...	...	...	...	...	...	...	105	2	...	...	...	1	...	...	...	...
Yaws . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
INTOXICATIONS—																			
Alcoholism . . . . .	...	...	...	28	1'42	3	...	...	...	...	...	...	...	...	2	2	...	...	...
Lathyrism . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Morphinism . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	177	13
Tobacco poisoning . . . . .	...	...	...	1	'09	...	...	...	...	...	...	...	...	...	...	...	...	1	...
General Diseases not classified as above:—																			
Anæmia . . . . .	...	...	...	48	3'62	...	1	24	2	5	...	2	...	...	1,122	9	27	401	18
„ chronic splenic . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	413	1
„ pernicious . . . . .	...	...	...	13	'69	1	...	...	...	...	...	...	...	...	...	...	...	9	3
Chlorosis . . . . .	...	...	...	...	...	...	...	1	...	1	...	...	...	...	5	...	...	...	...
Debility	22	...	5	786	30'40	1	13	791	...	176	3	4	...	...	499	2	10	585	8
Diabetes mellitus	1	...	...	7	'81	...	3	...	...	...	...	...	...	...	7	...	...	3	...
Exophthalmic goitre . . . .	...	...	...	4	'82	...	3	2	...	...	...	...	...	...	2	...	...	2	...
Gout	4	...	...	12	'69	...	...	...	...	...	...	1	...	...	14	...	...	3	...
Hæmophilia . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...
Leucocythæmia . . . . .	...	...	...	1	'20	1	1	...	...	...	...	...	...	...	4	...	...	1	...
Lymphadenoma . . . . .	...	...	...	1	'06	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Myxædema . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Obesity . . . . .	...	...	...	1	'08	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Osteo-arthritis	1	...	...	7	'23	...	1	1	...	...	...	...	...	...	33	...	2	1	...
Purpura . . . . .	...	...	...	2	'05	...	...	1	...	...	...	...	...	...	1	...	...	4	1
Rickets . . . . .	...	...	...	...	...	...	...	...	...	3	...	...	...	...	1	...	...	...	...
Scurvy . . . . .	...	...	...	...	...	...	...	...	...	...	...	2	...	...	149	1	3	218	4
Morbid conditions incident to various parts:—																			
Congenital malformations . .	...	...	...	19	1'01	...	...	...	...	6	5	...	...	...	4	...	1	3	...
New Growths Malignant (n. d.).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	10	1
„ „ Carcinoma	1	1	...	5	'34	4	1	2	2	...	...	...	...	...	2	3	...	11	10
„ „ Endothelioma . . .	...	...	...	1	'04	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ „ Epithelioma . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
„ „ Sarcoma	1	...	...	4	'64	2	2	...	...	...	...	...	...	...	...	...	...	...	3
Cysts . . . . .	...	...	...	31	1'13	...	...	5	...	1	...	...	...	...	73	...	1	16	...

TABLE XXXIII—continued.

DETAIL of DISEASES.

DISEASES.	EUROPEAN ARMY OF INDIA.												INDIAN ARMY.						JAIL POPULATION OF INDIA.	
	BRITISH OFFICERS ATTACHED TO EUROPEAN TROOPS.			MEN.				WOMEN.		CHILDREN.			BRITISH OFFICERS ATTACHED TO INDIAN TROOPS.			MEN.				
	Admissions.	Deaths.	Invalids.	Admissions.	Constantly sick.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	
Morbid conditions incident to various parts— <i>concl'd.</i>																				
New growth, non-malignant . . .	...	...	...	142	9'46	...	2	5	...	...	...	1	...	...	91	...	2	58	1
Parasites :—Ankylostomum duode- nale Dubini . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33	1	...	335	11
„ Ascaris lumbricoides, Linnæus . . .	...	...	...	2	'12	...	...	...	...	4	...	...	...	...	104	...	...	64	...
„ Bilharzia hæmatobia . . .	...	...	...	...	'14	...	1	...	...	...	...	...	...	...	...	...	...	1	...
„ Bothriocephalus latus . . .	...	...	...	1	'02	...	...	...	...	...	...	...	...	...	3	...	...	4	...
„ Cysticercus of the Taenia Solium . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
„ Echinococcus hominis . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
„ Favus . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	...
„ Filaria sanguinis homi- nis . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	...
„ Guinea-worm . . .	...	...	...	5	'52	...	...	...	...	...	...	...	...	...	327	...	2	397	...
„ Hæmopsis sanguisuga moquina Toudon . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
„ Lucilia macellaria . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
„ Musca Vomitoria . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
„ Oxyuris vermicularis, Bremser . . .	...	...	...	4	'05	...	...	...	...	1	...	...	...	...	6	...	...	13	...
„ Pudiculus capitis . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...
„ „ vestimenti . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	2	...
„ Phthirus inguinalis . . .	...	...	...	22	'33	...	...	...	...	...	...	...	...	...	...	...	...	2	...
„ Ringworm . . .	3	...	...	199	5'59	...	...	...	...	7	...	2	...	...	427	...	...	163	...
„ Scabies . . .	...	...	...	352	13'11	...	...	...	...	...	...	...	...	...	2,034	...	...	825	...
„ Tænia saginata Gæze . . .	...	...	...	1	'09	...	...	...	...	...	...	...	...	...	16	...	...	6	...
„ „ solium Linnæus . . .	...	...	...	204	4'30	...	...	12	...	18	...	...	...	...	32	...	...	88	...
„ Tinea versicolor . . .	...	...	...	3	'05	...	...	...	...	1	...	...	...	...	1	...	...	1	...
„ Trichocephalus dispar . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
LOCAL DISEASES.																				
NERVOUS SYSTEM—																				
Nervous	25	...	7	617	34'71	12	60	48	1	50	31	12	1	...	793	13	51	492	50	
Mental	2	...	2	37	6'46	1	28	3	...	...	...	...	...	...	49	1	23	45	4
Eye Diseases	12	...	...	417	21'65	...	22	38	...	169	...	7	...	...	2,878	...	38	1,470	...
Ear Diseases	6	...	...	674	31'98	1	44	6	...	15	1	2	...	...	397	...	6	281	2
Nose Diseases	3	...	...	99	5'44	...	2	5	...	20	...	7	...	...	814	1	2	142	2
DISEASES OF THE CIRCULATORY SYSTEM—																				
Aneurysm (including all varieties) . . .	...	...	...	6	1'52	2	3	...	...	...	...	...	...	...	3	...	...	8	5
Disordered action of the heart . . .	4	...	1	224	18'38	...	14	...	...	...	...	...	...	...	38	1	1	23	...
Valvular disease of the heart . . .	...	...	...	78	10'63	7	47	8	3	2	1	...	...	...	35	8	10	138	33
Varix . . . . .	...	...	...	172	11'88	...	...	9	...	...	...	...	...	...	11	...	3	1	...

DISEASES.	EUROPEAN ARMY OF INDIA.											INDIAN ARMY.						JAIL POPULATION OF INDIA.	
	BRITISH OFFICERS ATTACHED TO EUROPEAN TROOPS.			MEN.				WOMEN.		CHILDREN.		BRITISH OFFICERS ATTACHED TO INDIAN TROOPS.			MEN.				
	Admissions.	Deaths.	Invalids.	Admissions.	Constantly sick.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.
DISEASES OF THE CIRCULATORY SYSTEM— <i>concl.</i>																			
Other Circulatory diseases . . .	8	2	1	62	3'75	7	2	6	...	4	...	11	...	...	30	19	6	78	34
Diseases of the Respiratory System—	38	...	...	1,062	44'26	6	9	36	...	349	26	31	...	...	3,432	22	32	3,058	91
DISEASES OF THE DIGESTIVE SYSTEM—																			
Abscess of the liver	2	...	...	47	6'76	23	5	1	1	1	...	1	1	...	17	6	...	10	8
Appendicitis	13	...	1	314	21'79	19	1	16	...	6	1	8	1	...	105	4	2	34	5
Biliary colic . . . . .	...	...	...	5	'38	1	...	1	...	...	...	...	...	...	3	...	...	11	...
Cirrhosis of the liver . . . . .	...	...	...	5	'30	2	1	...	...	...	...	...	...	...	4	...	1	57	30
Colitis	27	...	...	438	21'29	1	...	8	...	22	1	14	...	...	556	4	1	296	5
Diarrhœa	40	...	...	1,111	32'73	...	1	70	...	284	36	28	...	...	1,826	3	1	4,332	78
Enteritis	12	...	...	87	3'46	2	...	10	1	128	51	13	...	...	180	4	1	343	20
Gastritis	23	...	...	299	13'16	2	1	24	...	18	...	5	...	...	75	...	2	85	3
Hepatitis	15	...	...	356	25'92	1	4	5	...	1	...	7	...	...	171	4	...	49	3
Hernia . . . . .	...	...	...	139	13'58	...	1	...	...	6	...	3	...	...	67	...	11	79	1
Jaundice	28	...	...	215	9'58	...	...	5	...	6	...	8	...	...	522	...	1	250	7
Peritonitis . . . . .	...	...	...	4	'27	3	...	1	1	...	...	...	...	...	7	3	...	17	16
Sprue . . . . .	...	...	...	4	1'15	...	3	4	...	1	...	1	...	...	15	2	...	8	4
Other diseases of the Digestive System	142	1	2	3,861	116'55	9	3	175	2	289	9	85	1	...	3,279	18	7	2,608	41
DISEASES OF THE LYMPHATIC SYSTEM—																			
Elephantiasis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...
Inflammation of lymphatic glands .	10	...	...	363	30'97	...	1	4	...	11	...	6	...	...	280	1	2	277	...
„ „ vessels	1	...	...	18	'31	...	...	...	...	...	...	1	...	...	14	...	...	...	...
Other diseases of the lymphatic system	1	...	...	31	3'29	...	1	2	...	...	...	...	...	...	111	...	4	225	4
DISEASES OF THE THYROID GLAND—																			
Abscess of the thyroid gland . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Goitre . . . . .	...	...	...	18	1'24	...	2	...	...	...	...	...	...	...	33	...	...	...	...
Inflammation . . . . .	...	...	...	2	'08	...	...	...	...	...	...	...	...	...	1	...	...	...	...
DISEASES OF THE URINARY SYSTEM																			
Bright's disease . . . . .	...	...	...	...	...	1	...	...	...	...	...	...	...	...	3	...	...	136	21
Calculus (including all varieties) .	...	...	...	3	'22	...	...	4	...	...	...	1	...	...	20	...	...	24	2
Hæmaturia . . . . .	...	...	...	33	1'27	...	...	...	...	...	...	2	...	...	8	...	...	16	...
Other diseases of the Urinary Sys- tem	11	1	1	152	13'39	5	15	18	1	6	1	7	...	...	152	...	3	110	13
DISEASES OF THE MALE ORGANS OF GENERATION—																			
Soft chancre of the penis . . . . .	...	...	...	703	66'44	...	...	...	...	...	...	...	...	...	594	...	...	143	...
Other diseases of the Male Organs of generation	14	...	...	641	34'47	...	1	...	...	19	...	5	...	...	492	3	3	586	2

TABLE XXXIII—continued.

DETAIL of DISEASES.

DISEASES.	EUROPEAN ARMY OF INDIA.											INDIAN ARMY.						JAIL POPULATION OF INDIA.	
	BRITISH OFFICERS ATTACHED TO EUROPEAN TROOPS.			MEN.				WOMEN.		CHILDREN.		BRITISH OFFICERS ATTACHED TO INDIAN TROOPS.			MEN.				
	Admissions.	Deaths.	Invalids.	Admissions.	Constantly sick.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.
DISEASES OF THE FEMALE ORGANS OF GENERATION--																			
Abortion . . . . .	...	...	...	...	...	...	...	111	...	...	...	...	...	...	...	...	...	7	1
Other diseases of the Female Organs of generation . . . . .	...	...	...	...	...	...	...	165	2	24	23	...	...	...	...	...	...	25	2
Diseases of the Female Breast . . . . .	...	...	...	...	...	...	...	19	...	...	...	...	...	...	...	...	...	...	...
DISEASES OF THE ORGANS OF LOCO- MOTION--																			
Lumbago . . . . .	...	...	...	10	'59	...	...	...	...	...	...	...	...	...	168	...	3	84	...
Myalgia	18	...	...	480	14'46	...	...	10	...	2	...	4	...	...	559	...	8	138	...
Other diseases of the Organs of Locomotion	32	...	...	922	50'55	...	18	10	...	15	...	31	...	...	888	...	26	340	8
Diseases of the Connective Tissue and Male Breast	83	...	...	1,779	73'70	1	2	23	...	30	...	17	...	...	2,114	2	4	4,297	10
DISEASES OF THE SKIN--																			
Boil	28	...	1	680	20'41	...	...	12	...	39	...	14	...	...	3,235	...	...	1,053	...
Carbuncle	3	...	...	16	'99	...	1	...	...	...	...	1	...	...	36	...	...	200	...
Delhi boil	1	...	1	42	2'93	...	...	...	...	1	...	3	...	...	235	...	...	10	...
Ulcer	3	...	...	111	5'11	...	1	1	...	5	...	...	...	...	548	...	...	1,842	1
Whitlow	3	...	...	83	3'29	...	...	4	...	...	...	1	...	...	359	...	...	316	...
Other diseases of the skin	13	...	...	1,001	46'41	...	2	17	...	55	1	9	...	...	1,180	...	2	719	1
INJURIES (General and Local)--																			
Sun stroke and heat-stroke	15	...	1	199	8'52	15	3	2	1	12	1	9	...	...	64	4	...	182	33
Other general	4	...	...	21	1'37	20	1	1	1	7	5	...	...	...	6	21	...	142	6
Local	235	3	3	4,244	203'95	21	42	18	...	82	1	126	1	...	13,861	18	77	3,946	37
Suicides . . . . .	...	...	...	9	...	23	...	...	...	...	...	...	...	...	...	11	...	...	13
Homicides . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	...	...	6
Poisons	2	...	...	45	1'26	7	...	2	1	...	...	...	...	...	84	5	...	87	9
Effects of anti-typhoid vaccine . . . . .	...	...	...	3	'05	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anti-rabic treatment	14	...	...	81	5'90	...	...	3	...	7	...	10	...	...	6	...	...	...	...
Deaths while on leave, etc. . . . .	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	585	...	...	...
Effects of plague vaccine	2	...	...	1	'04	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No appreciable disease . . . . .	...	...	...	211	11'37	...	1	63	...	23	...	...	...	...	13	...	...	29	...
Not yet diagnosed . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	1	...
Cause unknown . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	4	...	...	1
All causes	1,362	16	37	38,901	2,049'28	328	477	2,117	38	2,745	236	783	8	...	72,076	1168	609	67,934	1,908

TABLE XXXIII—concluded.

TROOPS ON FIELD SERVICE.

DETAIL of DISEASES.

DISEASES.	INDIAN TROOPS.		DISEASES.	INDIAN TROOPS.	
	ABOR EXPEDITION.			ABOR EXPEDITION.	
	Average annual strength—588.			Average annual strength.	
	Admis- sions.	Deaths.		Admis- sions.	Death.
GENERAL DISEASES.					
INFECTIVE DISEASES—					
Dysentery	51	1	DISEASES OF THE DIGESTIVE SYSTEM—		
Gonorrhœa	5	...	Hernia	2	...
Malaria	40	...	Sore throat	1	...
Mediterranean fever	1	...	Other digestive diseases	14	1
Minor septic diseases	21	...	Diseases of the Lymphatic system (except those in- cluded in Minor Septic diseases)	3	...
Major septic diseases	1	...			
Mumps	9	...	DISEASES OF THE MALE ORGANS OF GENERATION—		
Other diseases	19	...	Soft-chancre	1	...
Pneumonia	3	...			
Pyrexia of uncertain origin	11	...			
Rheumatic fever	9	...			
Syphilis	4	...			
GENERAL DISEASES NOT CLASSED AS ABOVE—					
Debility	9	...			
MORBID CONDITIONS INCIDENT TO VARIOUS PARTS—					
Parasites—Scabies	7	...	DISEASES OF THE ORGANS OF LOCOMOTION—		
LOCAL DISEASES.					
Nervous diseases	4	...	Myalgia	5	...
Eye-diseases	1	...	Other diseases of the organs of locomotion	4	...
Other organs of special sense	1	...	Diseases of the connective tissue	8	...
DISEASES OF THE CIRCULATORY SYSTEM—					
Disordered action of heart	1	...	Diseases of the skin	5	...
Other circulatory diseases	7	...	Injuries (Local)	42	...
Respiratory diseases	29	...	Not yet diagnosed	7	...
TOTAL .				325	2

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